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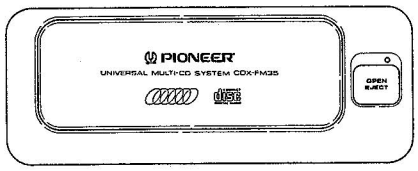
The Art of Entertainment

Service Manual



ORDER NO.
CRT1464

UNIVERSAL MULTI-CD SYSTEM

CDX-FM35 UC

COMPACT disc DIGITAL AUDIO

NOTE:

- Refer to the service manual CDX-M30/UC(CRT1463) for finding circuit description which are not shown in this manual.

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SPECIFICATIONS

General

System.....Compact disc audio system
Usable discs.....Compact Disc
Signal format.....Sampling frequency: 44.1 kHz
Number of quantization bits: 16; linear
Usable frequency.....89.1 MHz, 89.5 MHz
Power source.....14.4 V DC (10.8 – 15.6 V allowable)
Max. current consumption.....0.9 A
Weight (CD player unit).....3.0 kg (6.6 lbs.)
Dimensions
(CD player unit).....200 (W) × 75 (H) × 295 (D) mm
[7-7/8 (W) × 3 (H) × 11-5/8 (D) in.]
(FM Modulator unit).....160 (W) × 30 (H) × 100 (D) mm
[6-1/4 (W) × 1-1/8 (H) × 3-7/8 (D) in.]
(Keypad controller).....55 (W) × 68 (H) × 15 (D) mm
[2-1/8 (W) × 2-5/8 (H) × 5/8 (D) in.]

These specifications were determined and are presented in accordance with specification standards established by the Ad Hoc Committee of Car Stereo Manufacturers.

Note:
Specifications and the design are subject to possible modification without prior notice due to improvements.

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FS FEB. 1992 Printed in Japan

- **CD Player Service Precautions**

1. Since these screws protects the mechanism during transport, be sure to affix it when it is transported for repair, etc.
2. For pickup unit handling, please refer to "Disassembly" During replacement, handling precautions shall be taken to prevent an electrostatic discharge (protection by a short pin).
3. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.

1. SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

2. TRANS PORTATION SCREWS

Removal of Screws

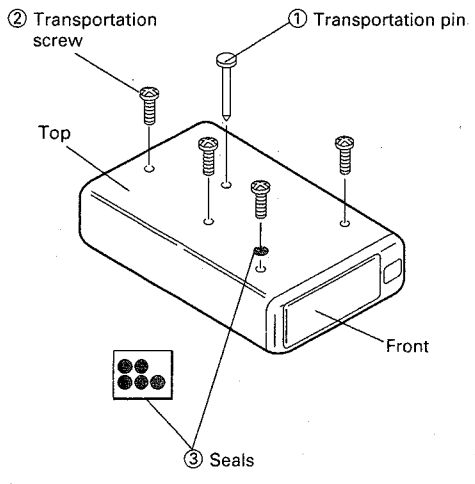
Be sure to remove transportation screws (red) ① and ② in this order and cover the screw holes with seals ③ before mounting the set. Peel off adhesive tape to remove the transportation pin ①. **The removed screws (red) and the pin will be required if you transport the player again later. Keep them in the bag for keeping transportation screws.**

Reinstallation of Screws

Be sure to reinstall the transportation screws (red) in the procedure described below before re-transporting the set. Incorrect order of reinstallation or use of different screws may cause the set to fail.

1. Let the set operate the beginning of a disc and stop operation within 10 seconds thereafter before removing the set.
2. Remove the magazine and then the set.
3. Reinstall the transportation screws in the reverse order (② and ①) of removal. Fasten the transportation pin ① with adhesive tape.

- Before screwing in the transportation screws, position the player vertically.



3. CONNECTING THE UNITS

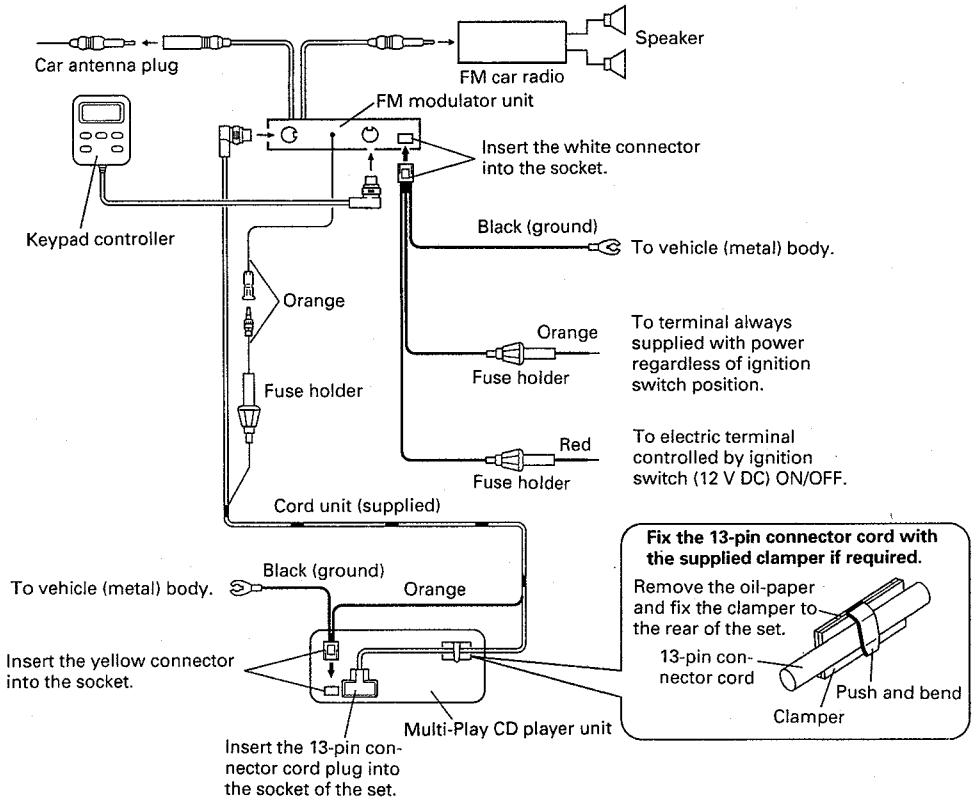

Car antenna plug
FM car radio
Speaker
FM modulator unit
Insert the white connector into the socket.
Keypad controller
Black (ground)
To vehicle (metal) body.
Orange
Fuse holder
Orange
Fuse holder
To terminal always supplied with power regardless of ignition switch position.
Red
Fuse holder
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Cord unit (supplied)
Fix the 13-pin connector cord with the supplied clamper if required.
Remove the oil-paper and fix the clamper to the rear of the set.
13-pin connector cord
Push and bend
Clamper
To vehicle (metal) body.
Black (ground)
Orange
Insert the yellow connector into the socket.
Multi-Play CD player unit
Insert the 13-pin connector cord plug into the socket of the set.

Fig. 1

4. GENERAL GUIDE

Multi-play CD Player Unit (Changer Assy)

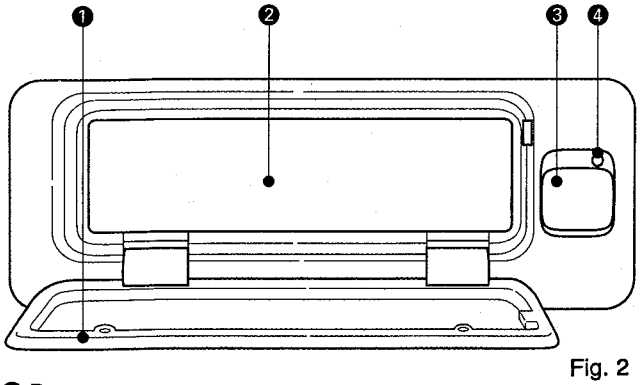


Fig. 2

❶ Door

Be sure never to leave the door open.

❷ Compact disc magazine slot

❸ Door open/eject button

Press this button to open the door ❶ and eject the magazine.

❹ Clear button

After connecting everything up, press the clear button with the tip of a pencil. If the power will not come on, or if the compact disc player does not operate when the button on the control unit is pressed, or if the control unit display is incorrect, press this button with the tip of a pencil to restore normal operation. **Always press the clear button on the FM modulator unit, too, after pressing this button.**

The Magazine Type Multi-Play CD players with ⟨⟨⟨⟨⟨ mark and the Magazines with the same mark are compatible for 5-inch (12 cm) discs.

Precautions when using 8-cm (3-inch) CDs

- **The magazine supplied with this CD player is for 12-cm (5-inch) CDs only. Do not put 8-cm (3-inch) CDs in the magazine, even with adapters, as they may cause a failure.**
- **To play 8-cm CDs, use the optional JD-M308 magazine, which holds six 8-cm CDs. The JD-M108 magazine for six 8-cm CDs cannot be used with this player.**

FM Modulator Unit (Control Assy)

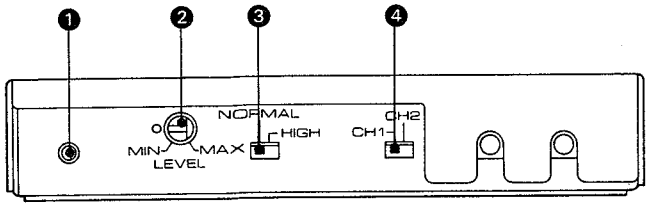


Fig. 3

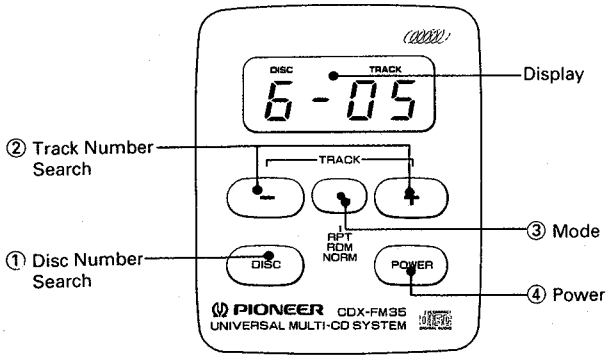
❶ Clear button
After connecting everything up, press the clear button with the tip of a pencil. If the power does not switch on, or if the CD player does not operate, when the button on the control unit is pressed, or if the control unit display is incorrect, press this button with the tip of a pencil to restore normal operation. Always press the clear button on the multi-play CD player unit, too, after pressing this button.

❷ Source level adjuster
Normally, set the source level adjuster to the position indicated by a dot (•). If, when you play discs, the volume is low compared with that for FM, turn the control clockwise. If the volume is high, and there is distortion, turn the control counterclockwise.

❸ Pre-emphasis correction switch
Normally, set the high-frequency correction switch to NORMAL. If you set it to HIGH, high-frequency sounds will emphasized a little; however, if this causes distortion (it depends on your radio), set the switch back to NORMAL.

❹ Modulating frequencies selector
The channel selector determines the FM frequency used to play discs via your radio. Normally, set the selector to CH1 (89.1 MHz). If a strong station breaks in on this frequency, set the switch to CH2 (89.5 MHz).

Keypad Controller (Control Assy)



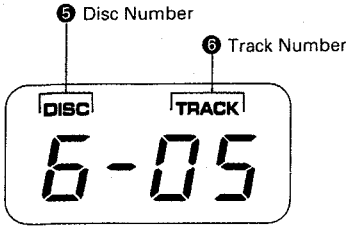


Fig. 4

[1] Switch the radio on and tune to 89.1 MHz or 89.5 MHz FM.
- Select CH1 (89.1 MHz) or CH2 (89.5 MHz) with the channel selector in the FM modulator unit beforehand.
- If you radio has preset tuning, you can preset the frequency of the selected channel.
- If your radio does not have muting, there may be some noise before power switch of control unit is ON. If this happens, turn down the volume of the radic.

[2] Press button ④ to switch on and start the player.
- If there is no magazine in the player, "N M" (no magazine) will appear on the control unit display for about five seconds to tell you to load a magazine.
- An "Err" (error) indicator is shown on the display and operation of the system becomes impossible when there are no discs in the magazine or when the discs are loaded in the magazine with their labels facing upwards whenever this message appears, remove the disc magazine and check the discs.

[3] Use the Disc Number Search function to select a disc.
Press button ① to select the desired disc number. The disc number is displayed at ❺.
- If a magazine tray contains no disc, the disc number will not displayed.

[4] Use Track Number Search to select a track.
Press the (+) to (–) side of button ②. Press the (+) side to increase the track number ❻, or the (–) side to decrease the number. Holding either side of button ② down changes the track number at high speed.

[5] Set the volume, balance, bass, and treble to the desired level using the car radio.

[6] To stop disc play, press button ④.
- If you want to listen to the radio or a cassette after stopping the player, turn down the volume of the radio and stop the player.

5. DISASSEMBLY

● Case

1. Unfasten six Screws A and then remove the upper case.
2. Unfasten four Screws B and then remove the lower case.

● Grille Assy

1. Unlock four catches and dismount the grille assembly.

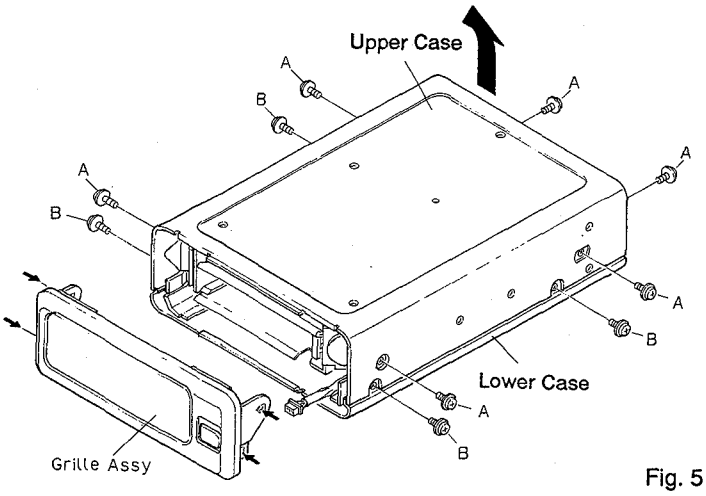


Fig. 5

● Chassis L

1. Unfasten four screws.
2. Disconnect two connectors and remove the sub chassis.
3. Remove the damper holder.
4. Remove the spring.
5. Remove chassis L.
6. Remove chassis R.

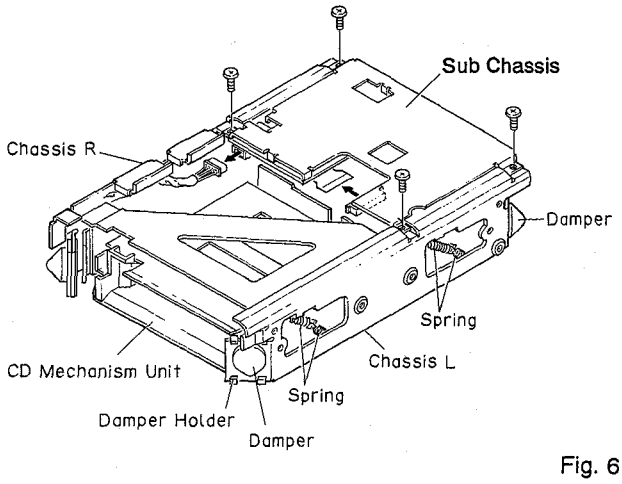


Fig. 6

● **CN351**

Before disconnecting the CN351 connector (PU unit connector), attach a short pin as illustrated.

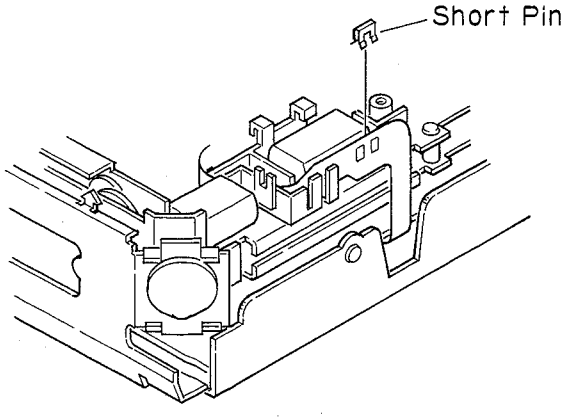
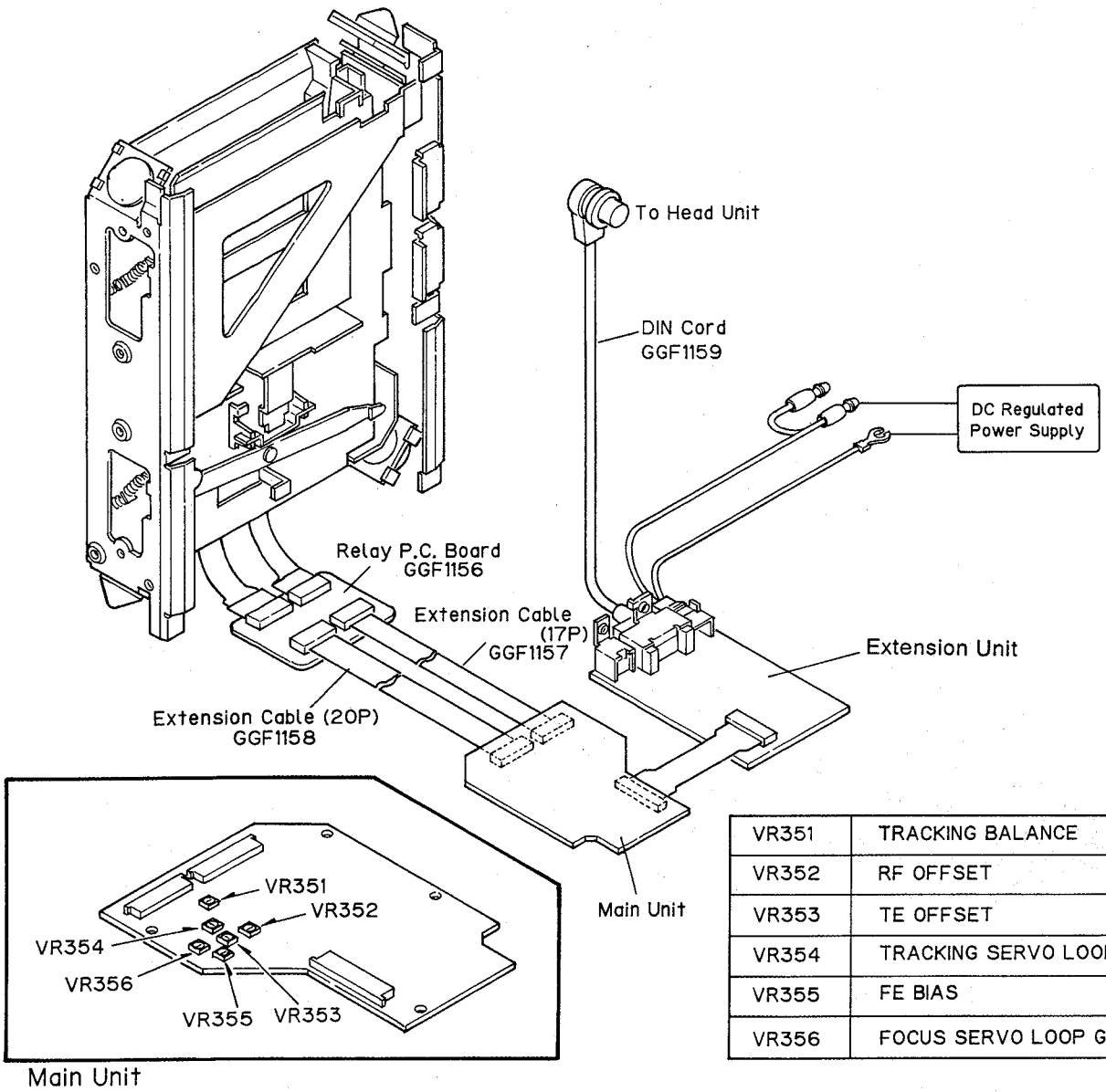


Fig. 7

● Measuring Equipment and Jigs

Adjustment	• Measuring equipment&jigs
Grating Adjustment	• Oscilloscope,clock driver,grating adjustment filter (bandpass filter)(GGF133),AC millivoltmeter • SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
Tangential Skew Check	•Oscilloscope,screwdriver •SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 • Relay P.C.Board:GGF1156
Grating Adjustment	• Oscilloscope,clock driver,two low-pass filters • SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
FE Bias Adjustment	Oscilloscope,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
RF Offset Adjustment	Oscilloscope,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
TE Offset Adjustment-1	DC voltmeter or oscilloscope,volume adjustment driver • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
Tracking Balance Adjustment-1	Oscilloscope,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
Focus Servo Loop Gain Adjustment	Oscillator,gain adjustment filter (GGF-065),Oscilloscope, dual meter milli-voltmeter,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
Tracking Servo Loop Gain Adjustment	Oscillator,gain adjustment filter (GGF-065),Oscilloscope, dual meter milli-voltmeter,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
TE Offset Adjustment-2	DC voltmeter,volume adjustment driver • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156
Tracking Balance Adjustment-2	Oscilloscope,volume adjustment driver SONY TYPE 4 (or TYPE 3) • Extension Cable:GGF1157,GGF1158 • DIN Cord:GGF1159 •Relay P.C.Board:GGF1156

• Adjustment Points



VR351	TRACKING BALANCE
VR352	RF OFFSET
VR353	TE OFFSET
VR354	TRACKING SERVO LOOP GAIN
VR355	FE BIAS
VR356	FOCUS SERVO LOOP GAIN

Fig. 9

6. BLOCK DIAGRAM

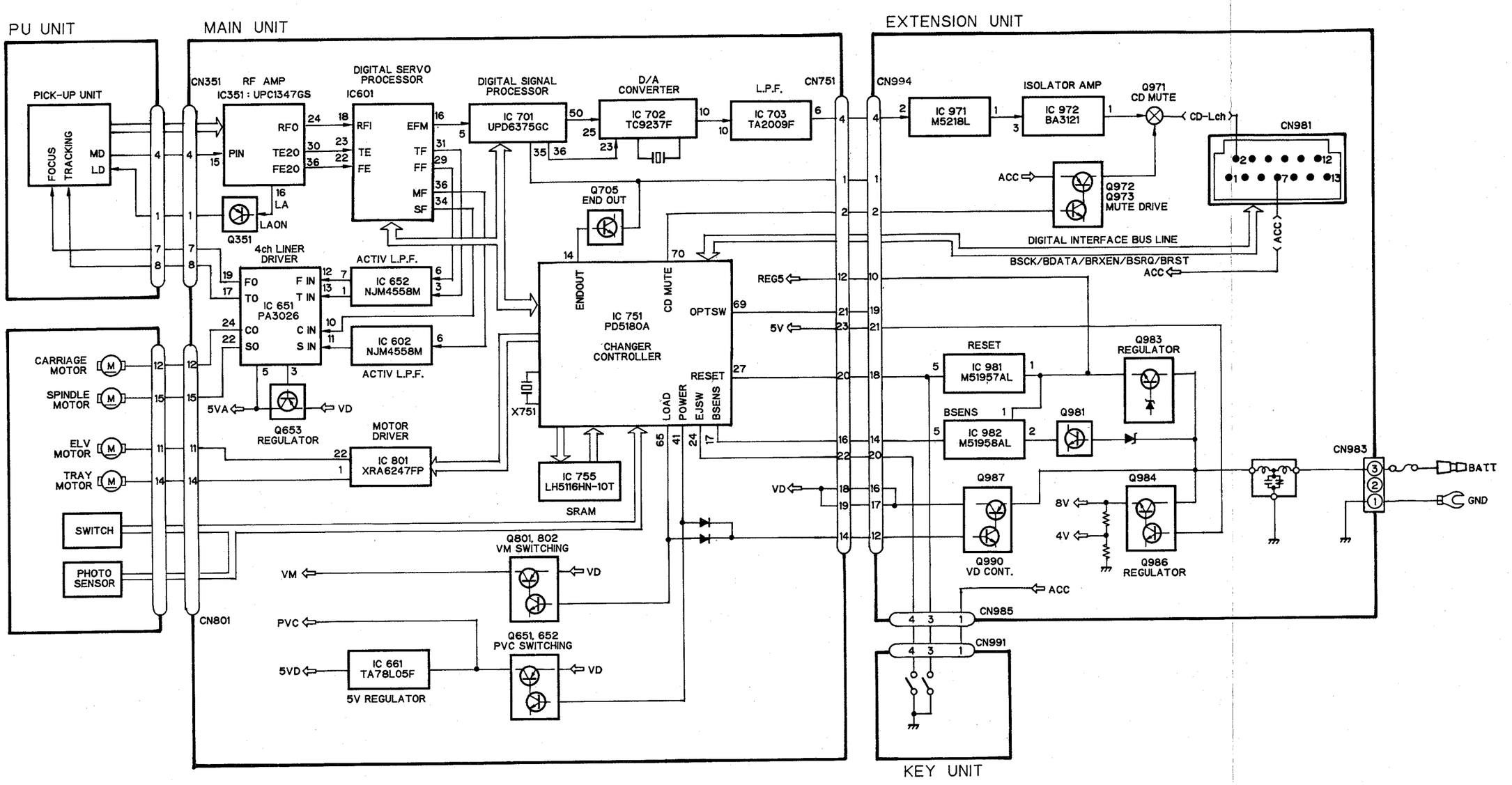


Fig. 8

7. ADJUSTMENT (Changer Assy)

1)Precautions

- This unit uses a single power supply (+5V) for the regulator. The signal reference potential,therefore,is connected to REFOUT(approx. 2.5V) instead of GND.

If REFOUT and GND are connected to each other by mistake during adjustments,not only will it be impossible to measure the potential correctly,but the servo will malfunction and a severe shock will be applied to the pick-up. To avoid this,take special note of the following.

Do not connect the negative probe of the measuring equipment to REFOUT and GND together. It is especially important not to connect the channel 1 negative probe of the oscilloscope to REFOUT with the channel 2 negative probe connected to GND.

And since the frame of the measuring instrument is usually at the same potential as the negative probe,change the frame of the measuring instrument to floating status.

If by accident REFOUT comes in contact with GND,immediately switch the regulator or power OFF.

- Always make sure the regulator is OFF when connecting and disconnecting the various filters and wiring required for measurements.
- Before proceeding to further adjustments and measurements after switching regulator ON,let the player run for about one minute to allow the circuits to stabilize.
- Since the protective systems in the unit's software are rendered inoperative in test mode,be very careful to avoid mechanical and /or electrical shocks to the system when making adjustment.
- When loading and unloading discs during adjustment procedures,always wait for the disc to be properly clamped or ejected before pressing the another key. Otherwise, there is risk of the actuator being destroyed.
- Turn power off when pressing the button ⏭ or the button ⏮ key for focus search in the test mode. (Or else lens may stick and the actuator may be damaged.)

2)Test mode

The model CDX-FM35 is adjusted in a combination with the multiple CD control head (FH-M75, etc.).Each regulator key should be operated at the head.With the FH-M75 taken up for reference,a description will be given below concerning how to enter into the test mode,including key operations. The key in the adjustment text is also one of the FH-M75 keys.

- How to enter into the test mode

  While pressing keys 4 and 6 at a time, press the back-up ON or clear button ON the FH-M75.

- Resetting the test mode

  Press the clear button ON the FH-M75. Subsequently press the clear button ON the CDX-FM35. Or turn off the CDX-FM35 and the FH-M75, back-up and wait for about one minute.

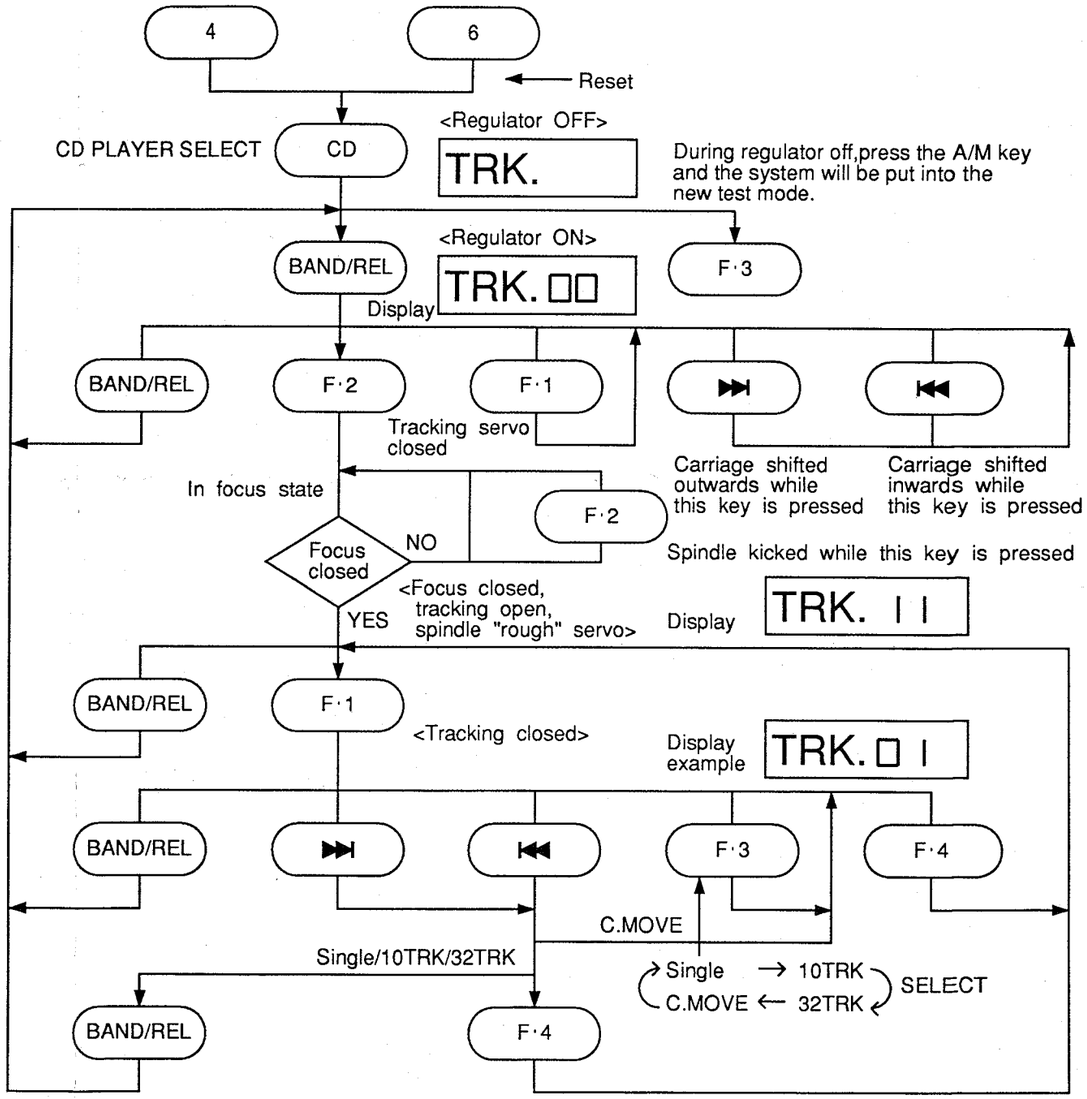
- Role to be played by each key in the test mode

  A function key permits you to select the CD multi-player,single CD player,deck,TV or tuner.

Key	Function
BAND/REL	RegulatorON/OFF
⏭	FWD Kick
⏮	REV Kick
EJECT	EJECT
F•3	Jump mode
F•1	Tracking close
F•4	Tracking open
F•2	Focus close
CD	CD ON/OFF

- SINGLE/10TRK/32TRK will continue to operate even after the key is released.Tracking closed the moment C-MOVE is released.
- JUMP MODE resets to SINGLE as soon as power is off.

● Flow Chart



7.1 Grating Adjustment (Rough adjustment)

- Purpose: The grating may need adjustment in a replaced pick-up unit.
- Maladjustment symptoms: No disc playback;track jumping.

• Measuring equipment / jigs • Measuring point • Test disc and setting • Adjustment position	• Oscilloscope,clock driver,grating adjustment filter (bandpass filter)(GGF-133),AC millivoltmeter • TEY • SONY TYPE 4 (or TYPE 3) • Test mode • Pick-up grating adjustment hole

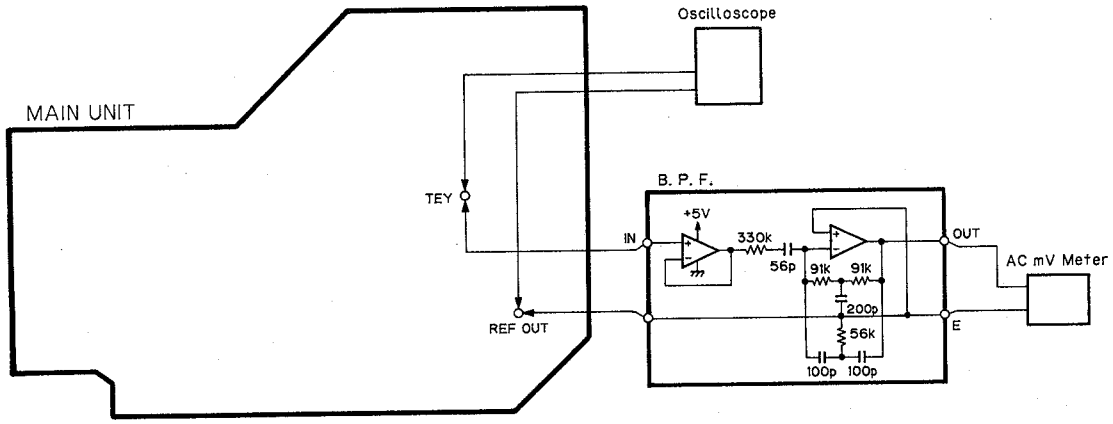
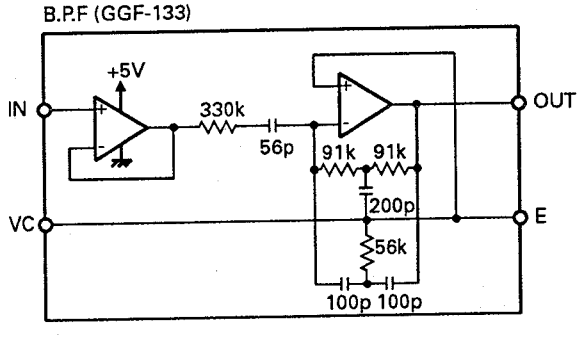


Fig.10

Adjustment Procedure

1. In the test mode,set a test desc-loaded magazine and select the tray with a test disc.
2. Switch regulator ON.
3. Using the ⏭ or ⏮ key,move the pick-up to about the center of the test disc.
4. Press the **F•2** key to close focus.
5. While monitoring the TEY filter output by AC milli-voltmeter,turn the grating adjustment hole slowly. The AC voltage increases and decreases while turning the screw. Search for the minimum voltage level. (This corresponds to the position where the grating is on a track,and is referred to as the null point.)
6. Then while monitoring TEY by oscilloscope,turn the driver slowly clockwise from the null point (as seen from under the pick-up) until the first waveform peak amplitude is reached.

B.P.F (GGF-133)



7.2 Tangential Skew Check

- Purpose: To check whether tangential skew has been misaligned or not when replacing the pick-up unit.
- Maladjustment symptoms: No disc playback;track jumping.

• Measuring equipment / jigs	• Oscilloscope,screwdriver
• Measuring point	• RFO
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Normal mode
• Adjustment position	• Pick-up tangential adjustment screw

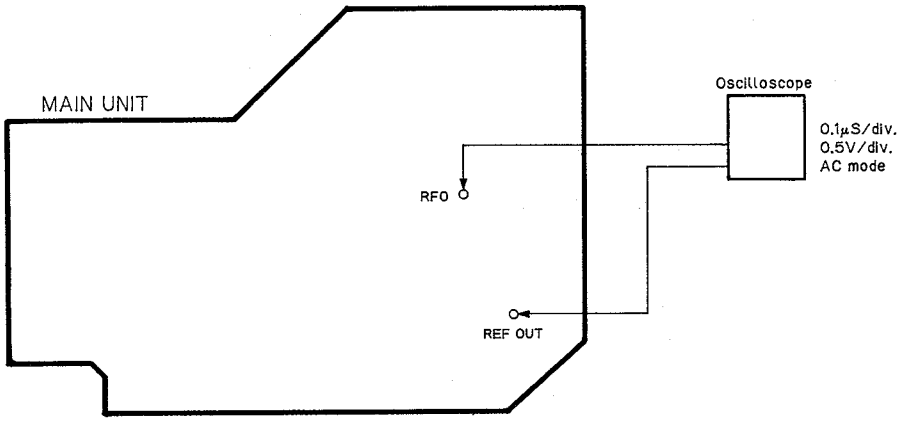
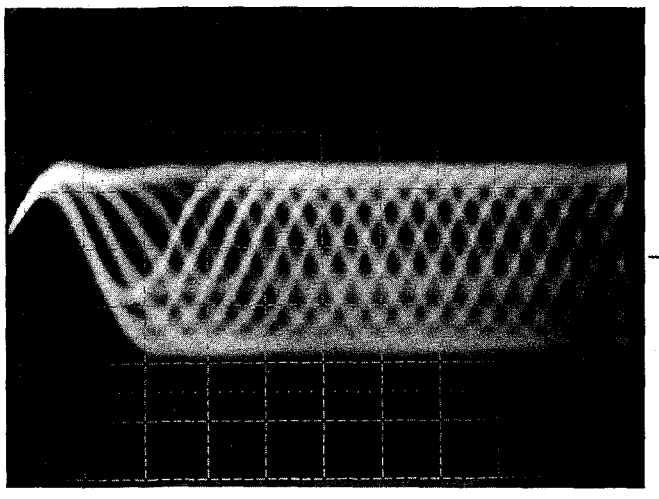


Fig.11

Adjustment Procedure

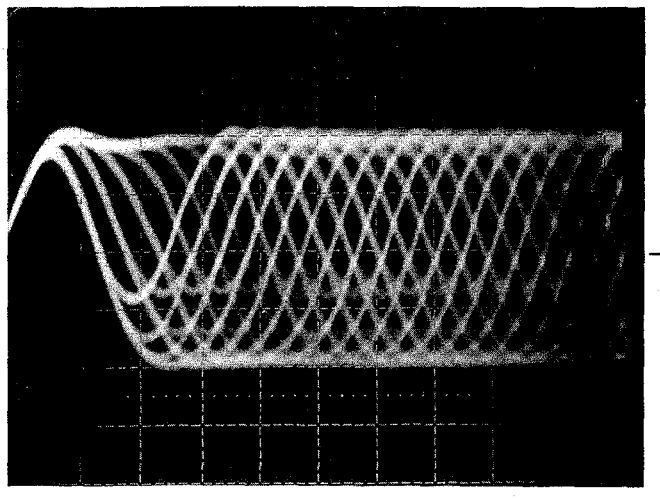
1. Play tune TNO 12 in normal mode.(TYPE 3:TNO 14)
2. Adjust the tangential adjustment screw so that the RF wave-form will have a level maximized and an eye pattern clearly viewed. Turn the adjustment screw both clockwise and counterclockwise to points where the eye pattern deteriorates,and take the midway point as the adjustment point. As a general guide,look for an overall clear wave-form,and one of the diamond shapes in the eye pattern. The diamond shapes should appear in fine lines at the point of optimum adjustment. Take care not to knock the pick-up with the screwdriver at this stage. (This kind of accident can result in loss of focus.) (See Fig.12,13)
3. Apply "screw-lock" to the tangential adjustment screw.
4. After adjusting tangential skew,also adjust the grating.



—REFOUT

NG

Fig. 12



—REFOUT

OK

Fig. 13

0.5V/div.
0.5 μ s/div.
DC mode

7.3 Grating Adjustment (Fine adjustment)

- Purpose: The grating may need adjustment in a replaced pick-up unit.
- Maladjustment symptoms: No disc playback;track jumping.

• Measuring equipment / jigs	• Oscilloscope,clock driver,two low-pass filters
• Measuring point	• E LPF output,F LPF output
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Test mode
• Adjustment position	• Pick-up grating adjustment hole

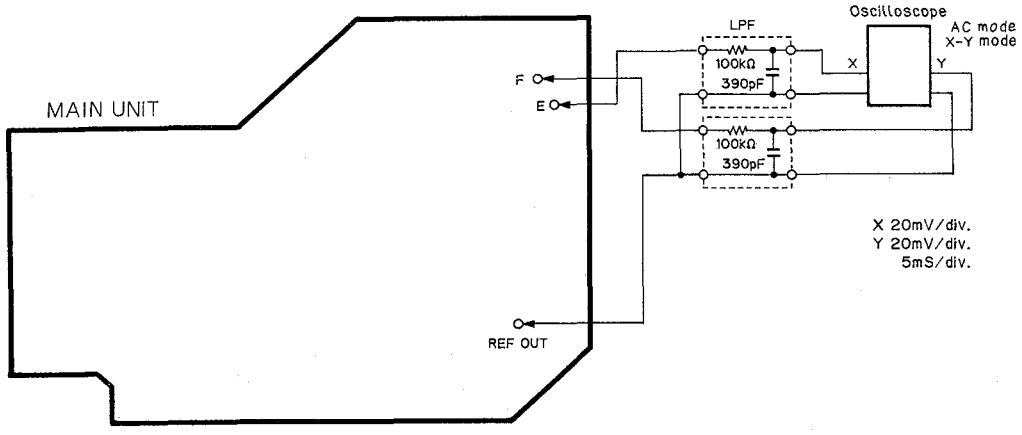


Fig.14

Adjustment Procedure

1. Connect a low-pass filter as shown in the above diagram.
2. Switch regulator ON in test mode,and load a disc.
3. Using the ⏭ or ⏮ key,move the pick-up to about the center of the test disc.
4. Press the **F•2** key to close focus.
5. Using the driver,adjust the Lissajous figure to a single line (or as close as possible).
6. Switch regulator OFF and remove the filters.

TEY waveform 5ms/div, 500mV/div

Nul Point

Lissajous figure (AC input)
Horizontal axis E 20mV/div
Vertial axis F 20mV/div

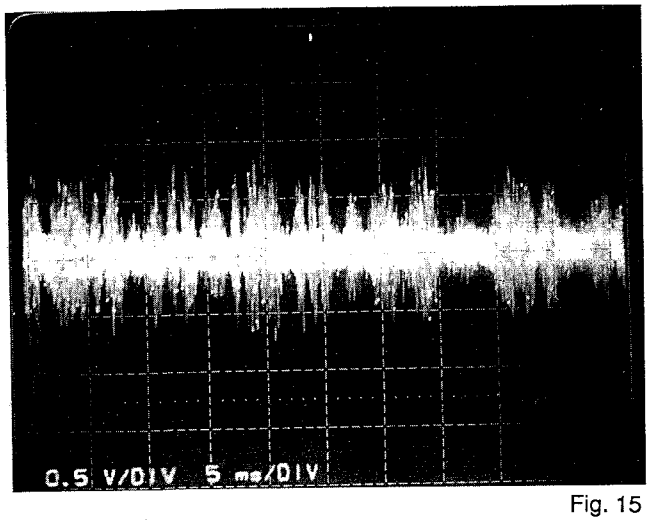


Fig. 15

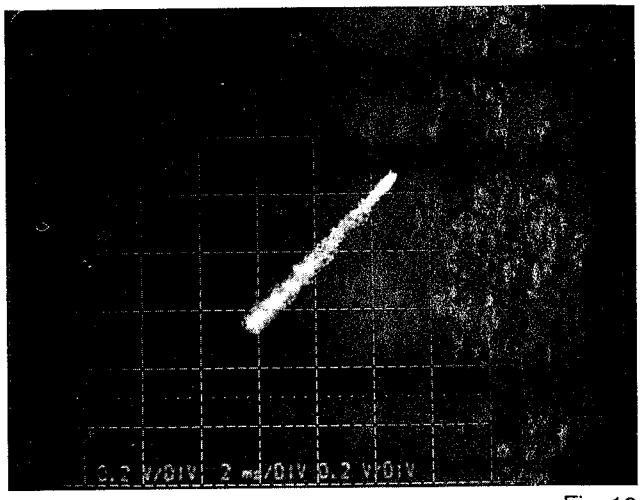


Fig. 16

"Rough" adjustment

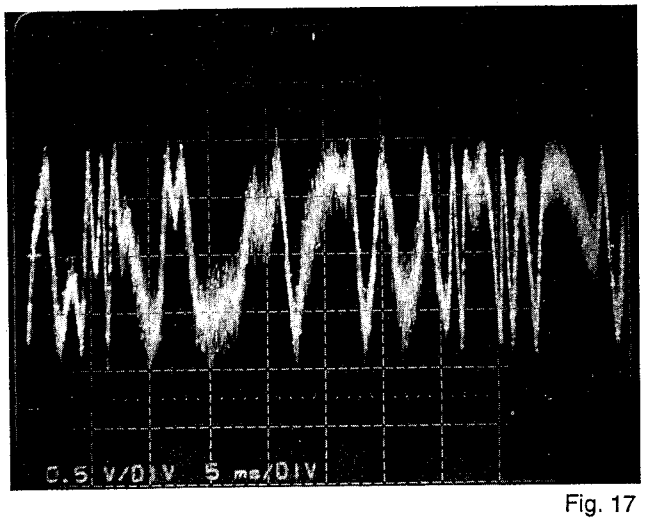


Fig. 17

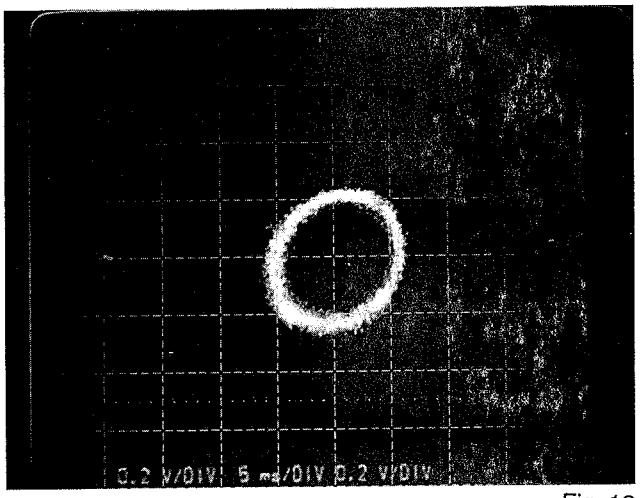


Fig. 18

Final adjustment

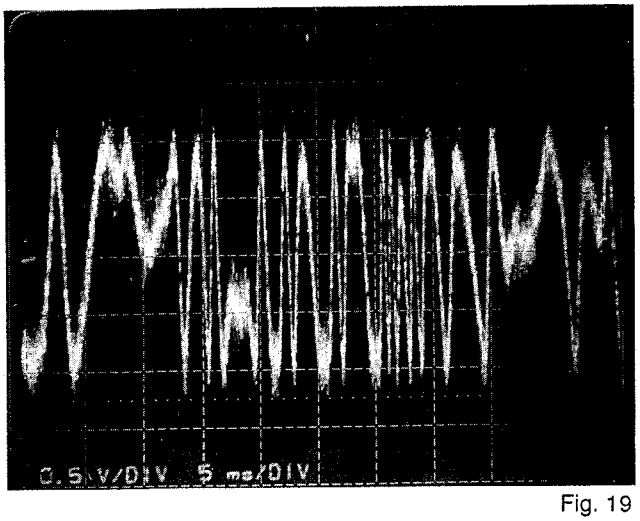


Fig. 19

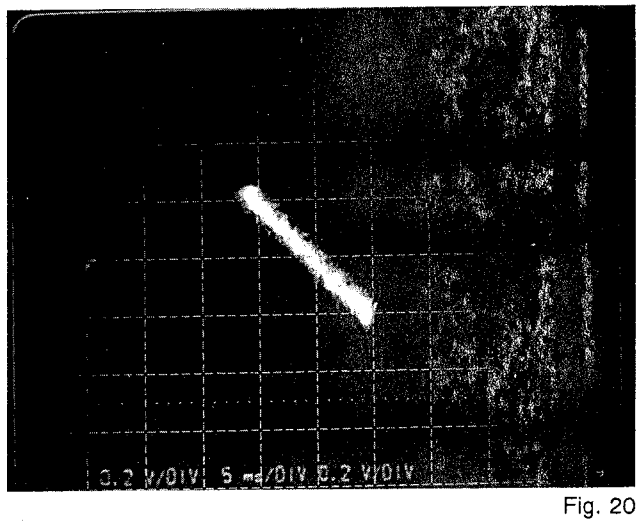


Fig. 20

7.4 FE Bias Adjustment

- Purpose: To adjust the focus servo bias to an optimum value.
- Maladjustment symptoms: Focus closing difficulty,poor playability.

• Measuring equipment / jigs	• Oscilloscope,volume adjustment driver
• Measuring point	• RFO
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Normal mode
• Adjustment position	• VR355(FEB)

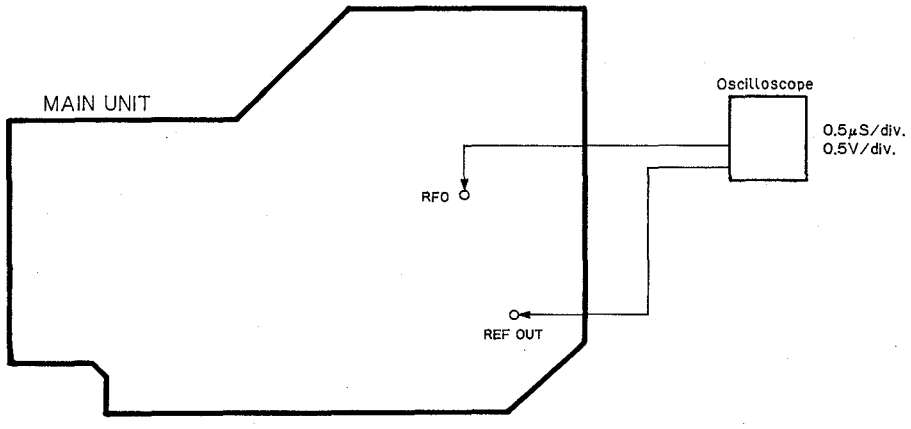
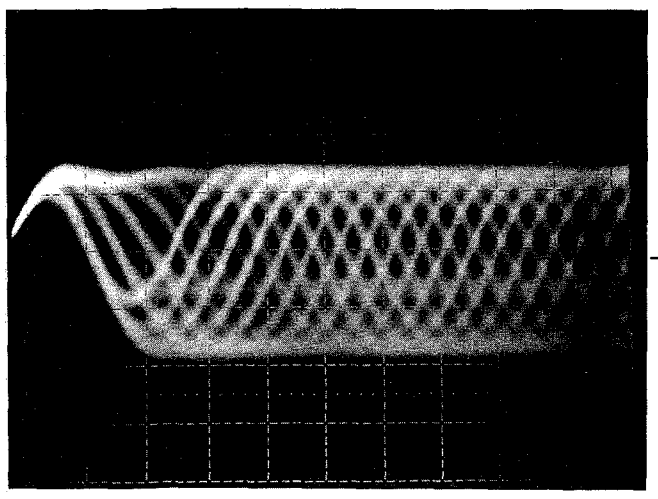


Fig.21

Adjustment Procedure

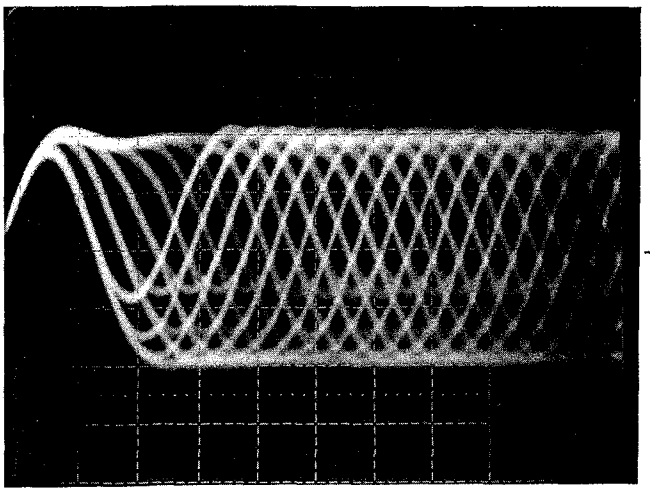
1. Play tune TNO 12 in normal mode.(TYPE 3:TNO 14)
2. Observe RFO in respect to REFOUT in the oscilloscope,and adjust VR355(FEB) to obtain maximum RF and optimum eye pattern. (See Fig.22,23)



—REFOUT

NG

Fig. 22



—REFOUT

OK

Fig. 23

0.5V/div.
0.5μs/div.
DC mode

7.5 RF Offset Adjustment

- Purpose: To adjust the RF amplifier offset to a suitable value.
- Maladjustment symptoms: Focus closure fails readily.

• Measuring equipment / jigs	• Oscilloscope,volume adjustment driver
• Measuring point	• RFO
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Normal mode
• Adjustment position	• VR352(RFO)

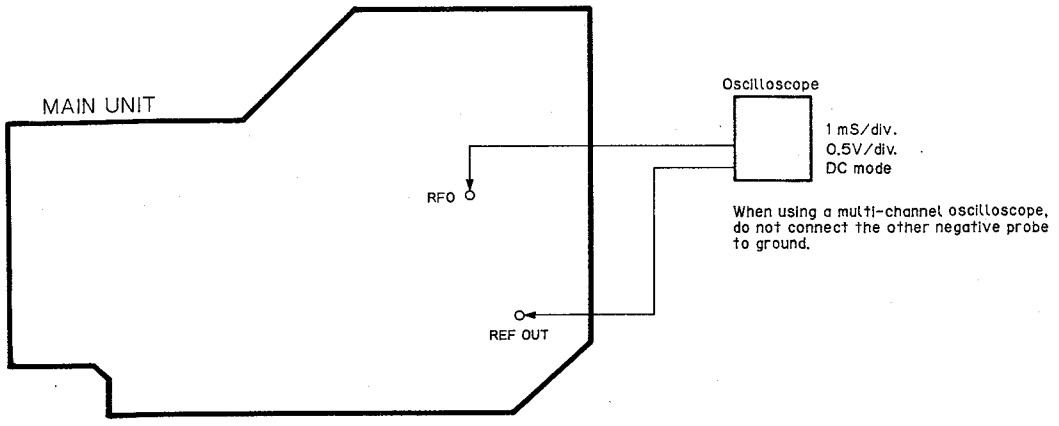
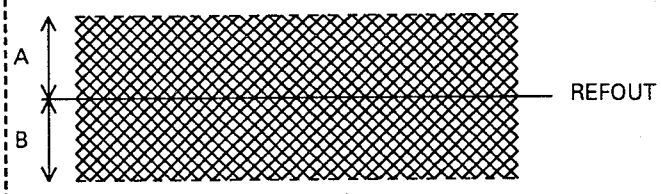


Fig.24

Adjustment Procedure

1. Play tune TNO 12 in normal mode. (TYPE 3:TNO 14)
2. Use VR352 to adjust the RFO waveform so that REFOUT appears at the center. (A-B must not exceed 100 mV.)



7.6 TE Offset Adjustment-1

- Purpose: To adjust the electrical offset of the tracking servo to zero.
- Maladjustment symptoms: Search times too long,carriage run-away.

• Measuring equipment / jigs	• DC voltmeter or oscilloscope,volume adjustment driver
• Measuring point	• TEY
• Test disc and setting	• Enpty magazine • Test mode
• Adjustment position	• VR353(TEO)

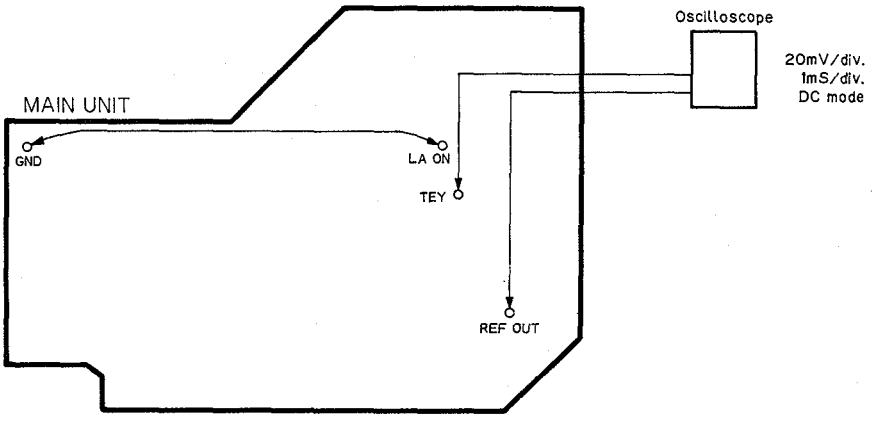


Fig.25

Adjustment Procedure

1. Connect LAON to GND.
2. Switch regulator ON while in test mode.
3. Using VR353(TEO),adjust the TEY output DC voltage in reference to REFOUT to a value of 0±25mV.
4. Switch regulator OFF.
5. Remove LAON to GND.

7.7 Tracking Balance Adjustment-1

- Purpose: To adjust the tracking servo offset to zero.
- Maladjustment symptoms: Search times too long,poor playability,carriage run-away.

• Measuring equipment / jigs	• Oscilloscope,volume adjustment driver
• Measuring point	• TEY (Tracking error signal)
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Test mode
• Adjustment position	• VR351(T.BAL)

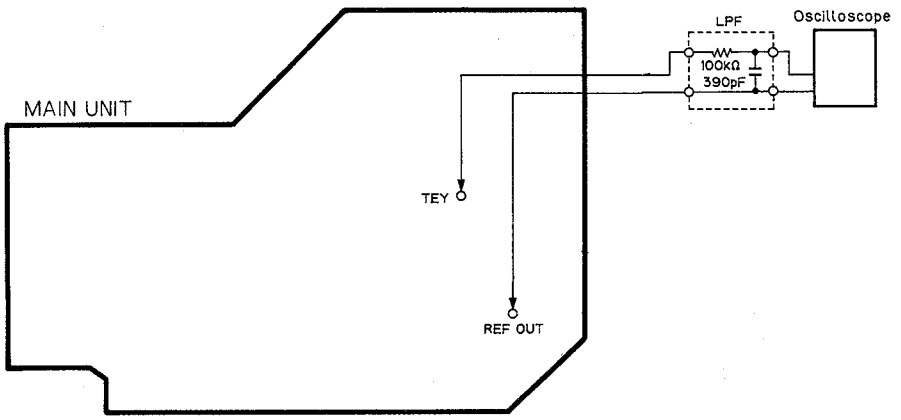
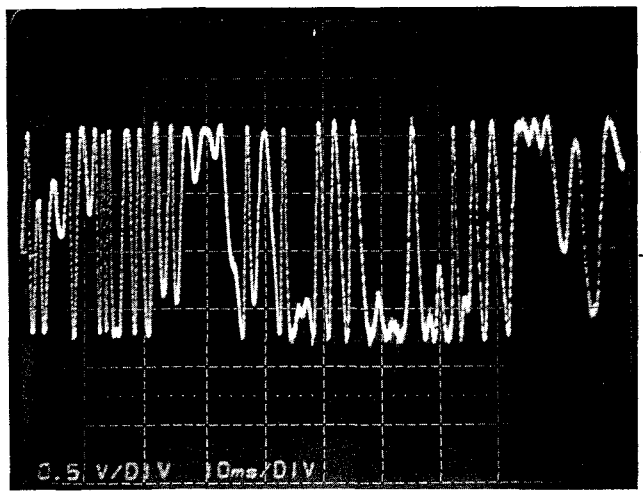


Fig.26

Adjustment Procedure

1. After checking that regulator is OFF,connect the low-pass filter as shown in the diagram.
2. Set the test disc (SONY TYPE 4). Switch regulator ON.
3. Using the ⏭ or ⏮ key,move the pick-up to about the center of the signal surface.
4. Press the **F•2** key to close focus.
5. Using an oscilloscope,observe the TEY signal in respect to REFOUT.
   Then adjust VR351(T.BAL) to set the positive and negative amplitudes to the same levels.(See Fig.27-29)
6. Switch the power OFF.



—REFOUT

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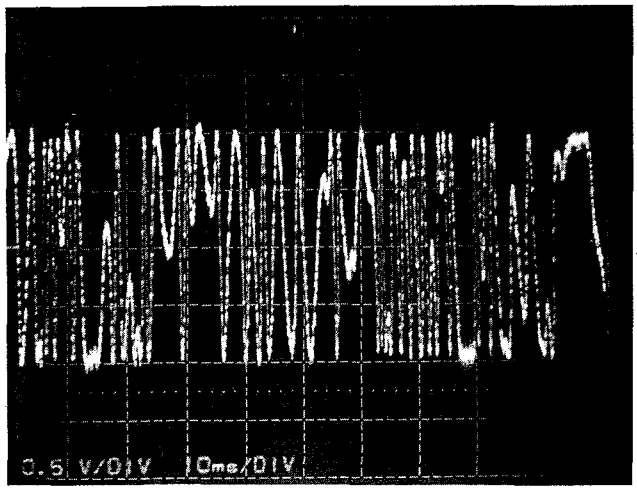
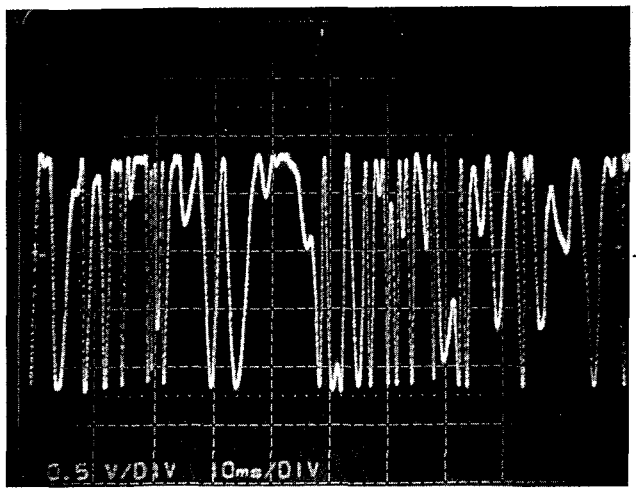
Fig. 27



—REFOUT

OK

Fig. 28



—REFOUT

NG

Fig. 29

7.8 Focus Servo Loop Gain Adjustment

- Purpose: To adjust the focus servo loop gain to an optimum value.
- Maladjustment symptoms: Poor playability,reduced resistance to vibration,focus closure fails readily.

• Measuring equipment / jigs • Measuring point • Test disc and setting • Adjustment position	• Oscillator,gain adjustment filter (GGF-065),dual meter milli-voltmeter,oscilloscope,volume adjustment driver • FEX,FEY • SONY TYPE 4 (or TYPE 3) • Normal mode • VR356(FG)

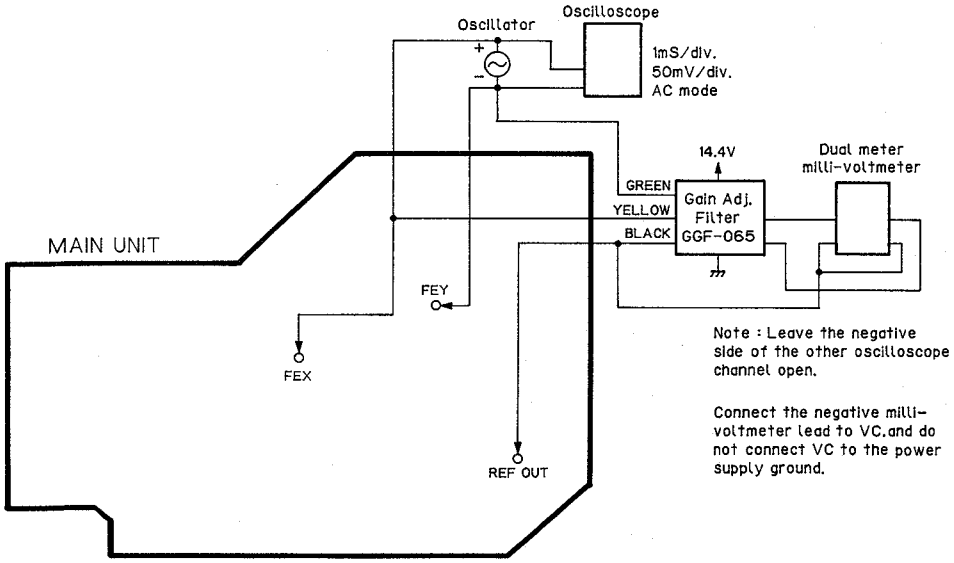


Fig.30

Adjustment Procedure

1. After checking that the power is OFF, connect the gain adjustment filter and measuring equipment as shown in the above diagram.
2. Play tune TNO 12 in normal mode. (TYPE 3:TNO 14)
3. Set the oscillator to 1kHz,and observe the FEX/FEY output in the oscilloscope. Adjust the oscillator output to obtain a FEX/FEY output of 100mVp-p.
4. Adjust VR356(FG) to obtain a milli-voltmeter difference of 0±0.5dB.

7.9 Tracking Servo Loop Gain Adjustment

- Purpose: To adjust the tracking servo loop gain to an optimum value.
- Maladjustment symptoms: Poor playability,reduced resistance to vibration.

• Measuring equipment / jigs	• Oscillator,gain adjustment filter (GGF-065),dual meter milli- voltmeter,oscilloscope,volume adjustment driver
• Measuring point	• TEX,TEY
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Normal mode
• Adjustment position	• VR354(TG)

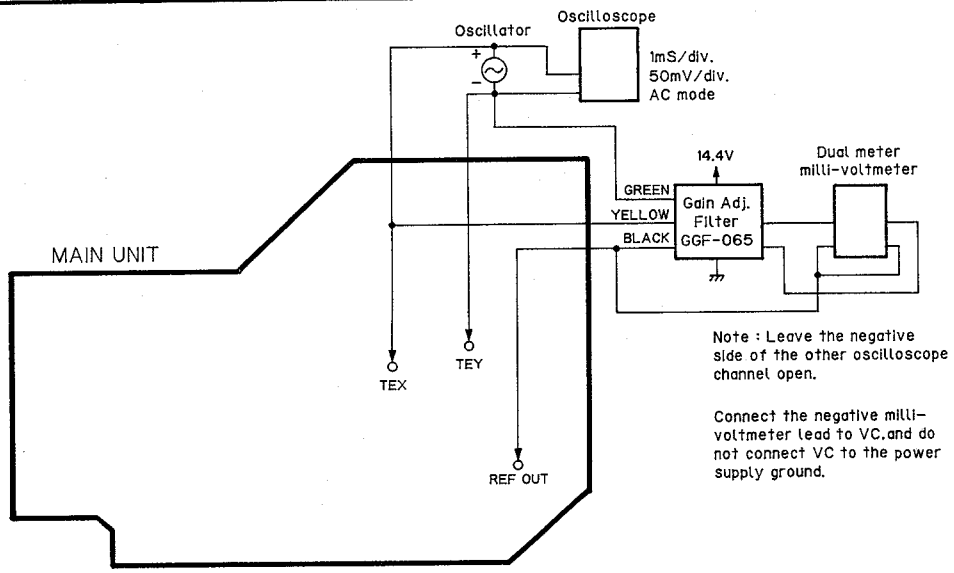


Fig.31

Adjustment Procedure

1. After checking that the power is OFF, connect the gain adjustment filter and measuring equipment as shown in the above diagram.
2. Play tune TNO 12 in normal mode. (TYPE 3:TNO 14)
3. Set the oscillator to 1.4kHz,and observe the TEX/TEY output in the oscilloscope. Adjust the oscillator output to obtain a TEX/TEY output of 300mVp-p.
4. Adjust VR354(TG) to obtain a milli-voltmeter difference of 0±0.5dB.

7.10 TE Offset Adjustment-2

- Purpose: To adjust the electrical offset of the tracking servo to zero.
- Maladjustment symptoms: Search times too long,carriage run-away.

• Measuring equipment / jigs	• DC voltmeter,volume adjustment driver
• Measuring point	• TEY
• Test disc and setting	• No Disc • Test mode
• Adjustment position	• VR353

Adjustment Procedure

Same as for TE offset adjustment-1,but with the DC voltage of the TEY output adjusted to 0±50mV.
The purpose of this additional adjustment is to correct any deviations generated when carrying out the tracking balance and tracking servo loop gain adjustments after completing TE offset adjustment-1.

7.11 Tracking Balance Adjustment-2

- Purpose: To adjust the tracking servo offset to zero.
- Maladjustment symptoms: Search times too long,poor playability,carriage run-away.

• Measuring equipment / jigs	• Oscilloscope,volume adjustment driver
• Measuring point	• TEY
• Test disc and setting	• SONY TYPE 4 (or TYPE 3) • Test mode
• Adjustment position	• VR351

Adjustment Procedure

Steps 1 thru 5 same as tracking balance adjustment-1.

6. Check that the level difference between the positive and negative amplitudes of the TEY signal is within 5% (See Fig.27-29). If greater than 5%,adjust with VR351.
7. If further adjustment was necessary in step 6,repeat TE offset adjustment-2.

8. ADJUSTMENT (Control Assy)

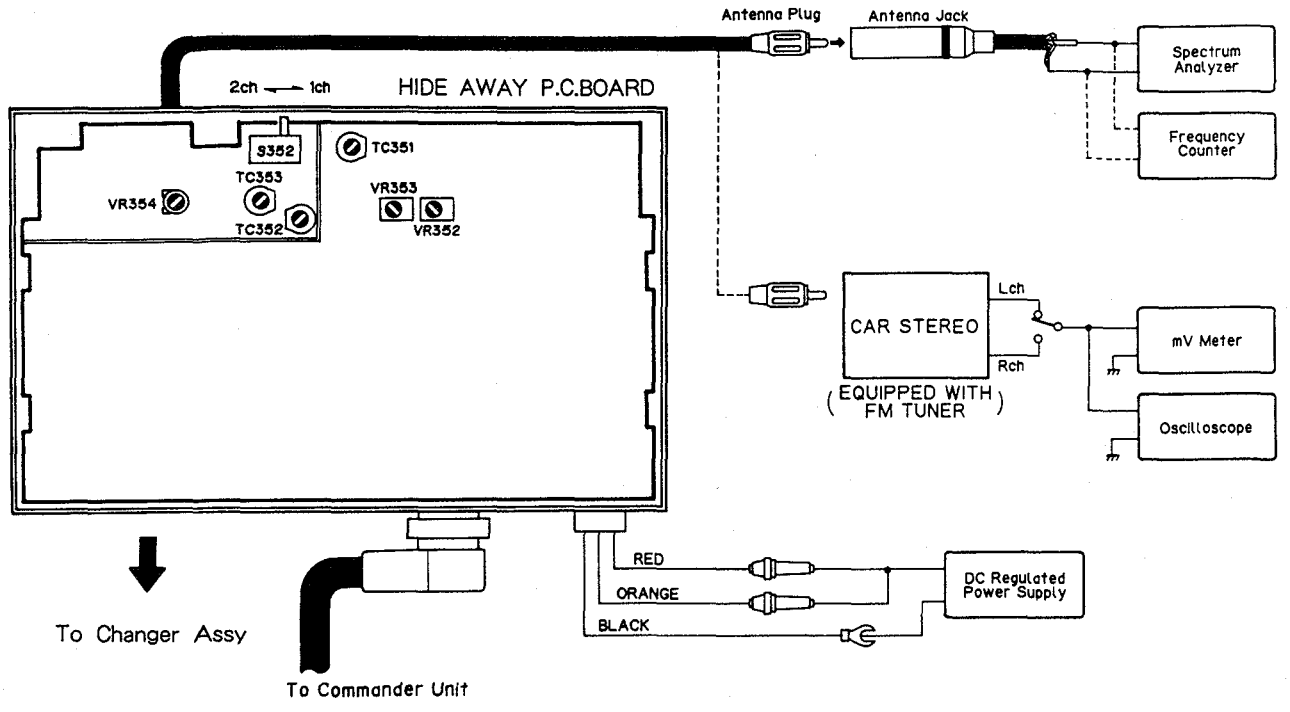


Fig. 32

FREQUENCY ADJUSTMENT

No.		Adjusting Point	Adjustment Method (Switch Position)
1	No signal from multi-play CD player unit	TC352	Spectrum Analyzer or Frequency Counter :89.1MHz (S352:1CH)
2	No signal from multi-play CD player unit	TC353	Spectrum Analyzer or Frequency Counter :89.5MHz (S352:2CH)

RF OUTPUT ADJUSTMENT

No.		Adjusting Point	Adjustment Method (Switch Position)
1	No signal from multi-play CD player unit	VR354	Spectrum Analyzer:75±5dBμV (S352:1CH and 2CH)

DC OFFSET ADJUSTMENT

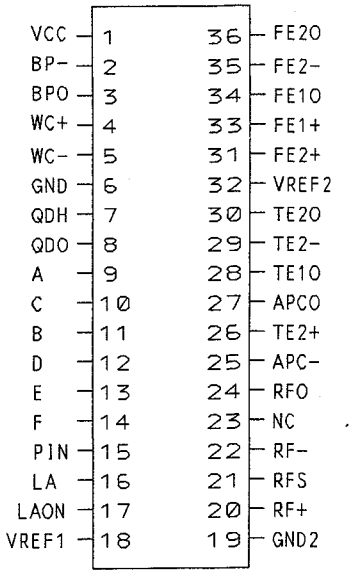
No.		Adjusting Point	Adjustment Method (Switch Position)
1	No signal from multi-play CD player unit	VR352	Leakage of 38kHz signal becomes minimum

SEPARATION ADJUSTMENT

No.		Adjusting Point	Adjustment Method (Switch Position)
1	1kHz 0dBμV(Lch) from multi-play CD player unit	TC351 VR353	Signal Leakage to the R-channel(crosstalk) becomes minimum

• ICs

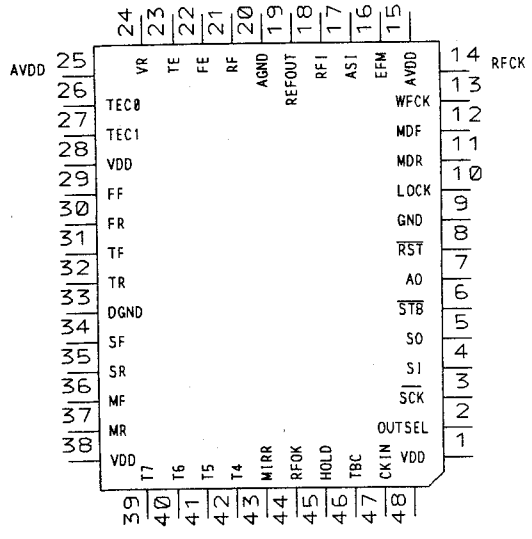
IC351 : UPC1347GS



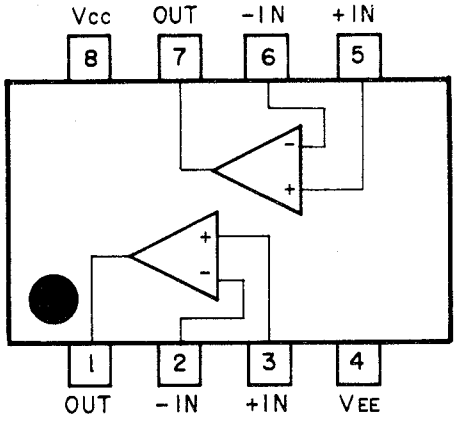
• Pin Functions(UPC1347GS)

Pin No	Pin Name	I/O	Function and Operation
1	VCC		
2	BP-	Input	Vibration detect amplifier 1 inverter input
3	BPO	Output	Vibration detect amplifier 1 output
4	WC+	Input	Window comparator non-inverting input
5	WC-	Input	Window comparator inverter input
6	GND		GND
7	QDH	Input	Vibration detect amplifier 3 non-inverting input
8	QDO	Output	Vibration detect amplifier 3 output
9	A	Input	A signal input
10	C	Input	C signal input
11	B	Input	B signal input
12	D	Input	D signal input
13	E	Input	E signal input
14	F	Input	F signal input
15	PIN	Input	APC circuit PD amplifier input
16	LA	Output	APC circuit LD amplifier output
17	LAON		Laser diode ON/OFF switching
18	VREF1		Reference voltage
19	GND2		GND
20	RF+	Input	RF amplifier non-inverting input
21	RFS	Output	RF summing virtual output
22	RF-	Input	RF amplifier inverter input
23	NC		
24	RFO	Output	RF amplifier output
25	APC-	Input	APC circuit PD amplifier inverter input
26	TE2+	Input	Tracking error amplifier 2 non-inverting input
27	APCO	Output	APC circuit PD amplifier output
28	TE1O	Output	Tracking error amplifier 1 output
29	TE2-	Input	Tracking error amplifier 2 inverter input
30	TE2O	Output	Tracking error amplifier 2 output
31	VREF2		Reference voltage
32	FE2+	Input	Focus error amplifier 2 non-inverting input
33	FE1+	Input	Focus error amplifier 1 non-inverting input
34	FE1O	Output	Focus error amplifier 1 output
35	FE2-	Input	Focus error amplifier 2 inverter input
36	FE2O	Output	Focus error amplifier 2 output

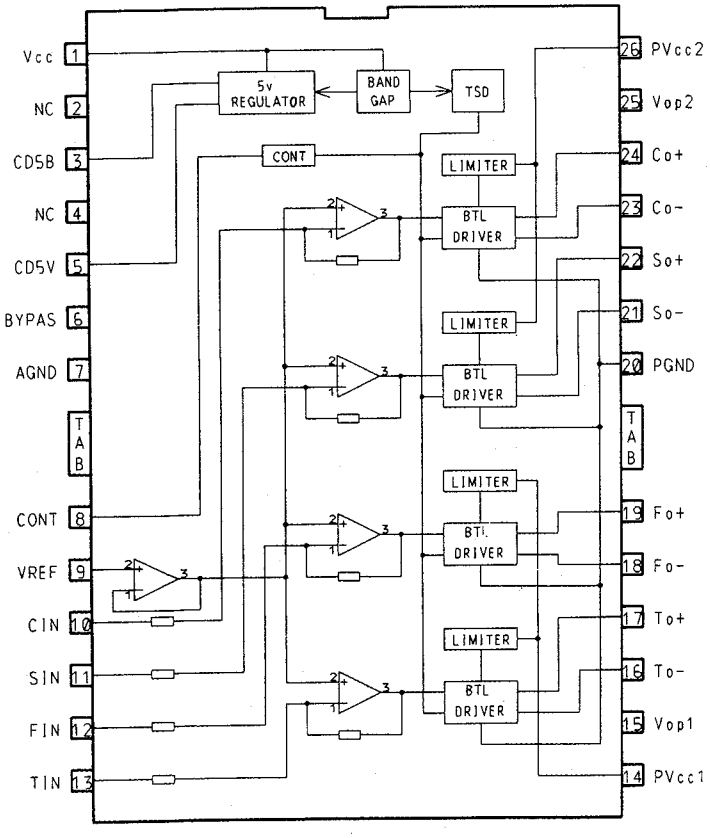
IC601 : GGF9001



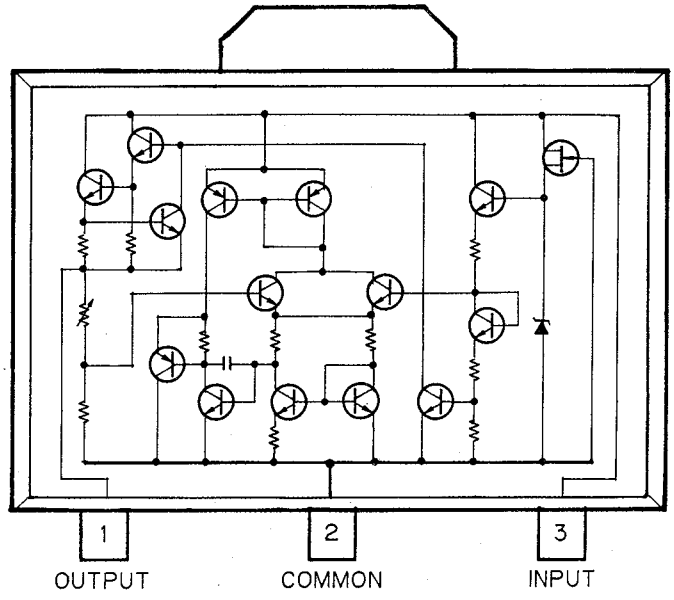
IC602, 652 : RC4558M



IC651 : PA3026



IC661 : TA78L05F

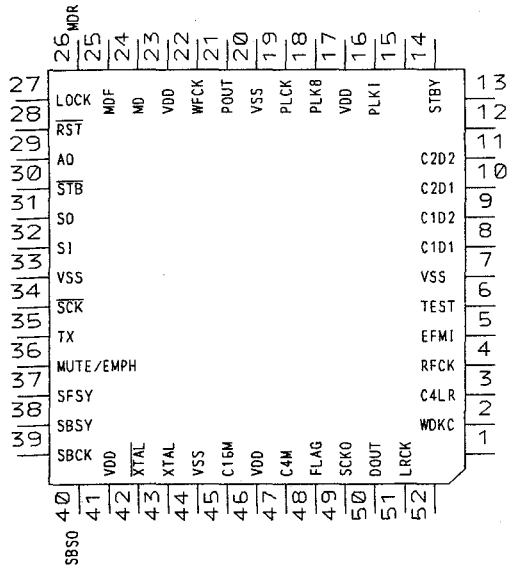


• Pin Functions (UPD6375GC)

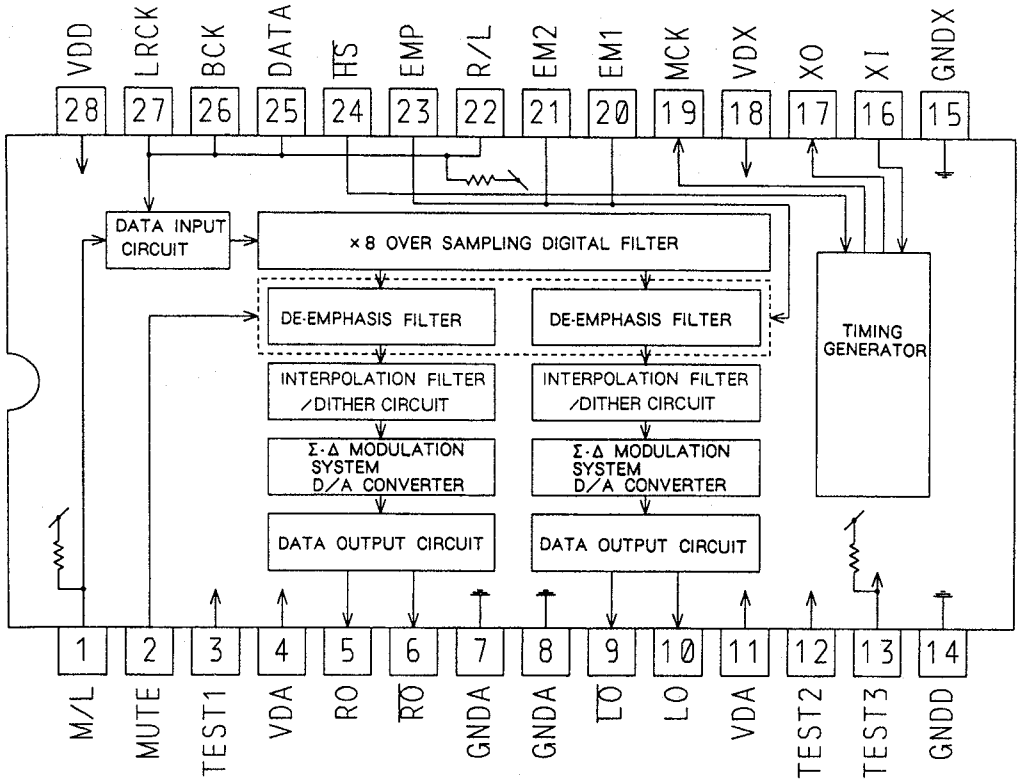
Pin No	Pin Name	I/O	Function and Operation
1	NC		
2	WDCK	Output	Output terminal for signal having double the frequency of LRCK
3	C4LR	Output	Output terminal for signal having four the frequency of LRCK
4	RFCK	Output	Oscillation clock divider signal, output terminal for signal giving one-frame synchronization
5	EFMI	Input	EFM signal input terminal
6	TEST		TEST
7	VSS		GND
8	C1D1	Output	Output terminal indicating C1 error correction status
9	C1D2	Output	
10	C2D1	Output	Output terminal indicating C2 error correction status
11	C2D2	Output	
12, 13	NC		
14	STBY	Input	Standby input terminal. STBY=H stops clock oscillation
15	NC		
16	PLK1	Output	VCO output terminal for use in analog PLL selection
17	VDD		VDD
18	PLK8	Input	VCO clock input terminal for use in analog PLL selection
19	PLCK	Output	Bit clock monitor terminal
20	VSS		GND
21	POUT	Output	Output terminal for phase comparison between EFM signal and bit clock
22	WFCK	Output	Signal issuring one-frame period (approximately 7.35kHz) by bit clock dividing signal
23	VDD		5 V
24	MD	Output	Signal indicating spindle motor CLV servo control output status
25	MDF	Output	Spindle motor CLV servo control positive direction output terminal
26	MDR	Output	Spindle motor CLV servo control negative direction output terminal
27	LOCK	Output	Becomes "H" when the synchronization signal and frame counter output coincide at EFM demodulator
28	$\overline{RST}$	Input	Reset signal input terminal
29	A0	Input	Control signal distinguishing data from microcomputer
30	$\overline{STB}$	Input	Signal latching within this LSI the serial data fetched from SI terminal
31	SO		Serial data input terminal
32	SI	Input	Input terminal fro data from microcomputer
33	VSS		GND
34	$\overline{SCK}$	Input	Clock input terminal for serial data input
35	TX	Output	Digital audio interface data output terminal
36	MUTE/EMPH	Output	Output terminal for mute command decoding signal or sub-Q command pre-emphasis data
37	SFSY	Output	Signal indicating subcode one-frame synchronization
38	SBSY	Output	Signal indicating head of subcode block
39	SBCK	Input	Subcode data read clock input terminal
40	SBSO	Output	Subcode data output terminal
41	VDD		5 V
42	$\overline{XTAL}$	Output	Oscillation continuation terminal
43	XTAL	Input	Oscillation continuation terminal

Pin No	Pin Name	I/O	Function and Operation
44	VSS		GND
45	C16M	Output	Oscillation clock output terminal
46	VDD		5 V
47	C4M	Output	1/4 cycle output terminal for oscillation clock signals
48	FLAG	Output	Flag signal indicating that the current audio data output consists of incorrectable data
49	SCKO	Output	Clock output terminal for audio serial data
50	DOUT	Output	Serial audio data output terminal
51	LRCK	Output	Signal distinguishing between left and right channel DOUT terminal output
52	NC		

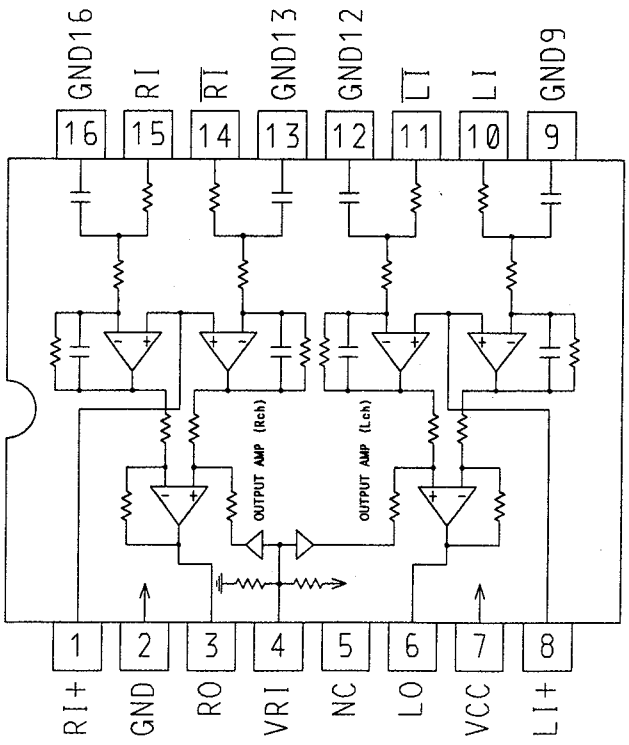
IC701 : UPD6375GC



IC702 : TC9237F



IC703 : TA2009F



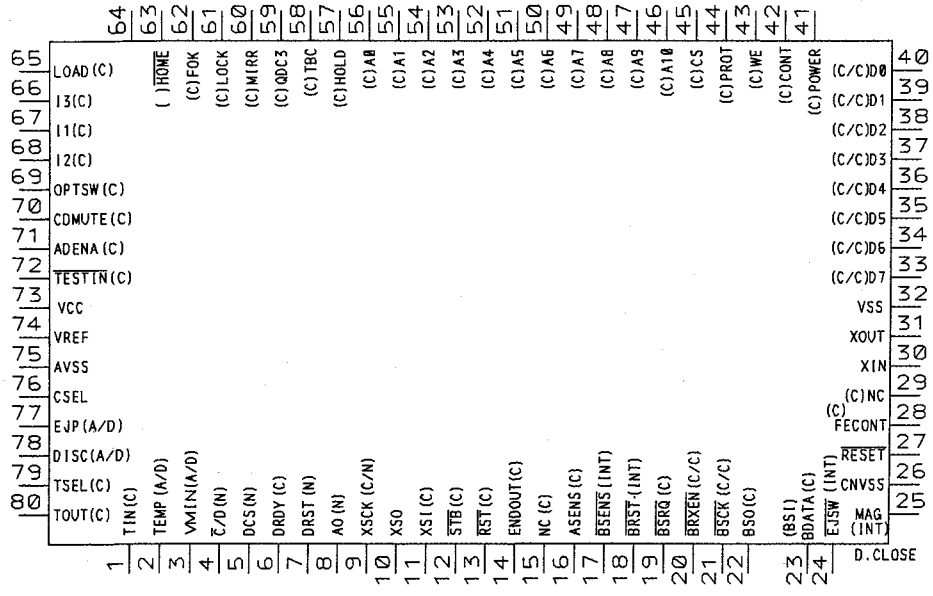
• Pin Functions (PD5180A)

Pin No.	Pin Name	I/O	I/O Format	Function and Operation
1	TIN	Input		Disc position detector switch
2	TEMP			Temperature detector
3	VMIN			Mechanism power supply detector input
4	$\overline{C}$/D	Output	NM	Command/data appointment output
5	DCS	Output	NM	Chip select output
6	DRDY	Input		Ready input
7	DRST	Output	NM	Reset output
8	A0	Output	NM	LSI data control signal
9	XSCK	Input/ Output		LSI clock input/output
10	XSO	Output	NM	LSI data output
11	XSI	Input	NM	LSI data input
12	$\overline{STB}$	Output	C	LSI strobe output
13	$\overline{RST}$	Output	C	Reset output pin
14	ENDOUT	Output	C	Digital output enable signal
15,16	NC			
17	$\overline{BSENS}$	Input		Back up power sense input pin
18	$\overline{BRST}$	Input		Bus communication reset input pin
19	$\overline{BSRQ}$	Output	C	Bus communication service request output pin
20	$\overline{BRXEN}$	Input/ Output	C	Bus communication reception enable input pin
21	$\overline{BSCK}$	Input/ Output	C	Bus serial clock input/output
22	BSO	Output	C	Serial data output pin
23	BSI	Input		Bus serial data input
24	$\overline{EJSW}$	Input		Eject signal input
25	MAG	Input		Magazine lock switch
26	CNVSS			GND
27	$\overline{RESET}$	Input		Reset input
28	FECNT	Output	C	DEFECT port
29	NC			Not used
30	XIN	Input		Crystal oscillating element connection pin
31	XOUT	Output	C	Crystal oscillating element connection pin
32	VSS			GND
33−40	D7-D0	Input/ Output		External RAM data line
41	POWER	Output	C	CD +5V control
42	CONT	Output	C	Servo driver power supply control
43	$\overline{WE}$	Output	C	External RAM write enable
44	$\overline{PROT}$	Output	C	External RAM output enable
45	$\overline{CS}$	Output	C	External RAM chip select
46-56	A10-A0	Output	C	External RAM address line
57	HOLD	Output	C	Hold control output
58	TBC	Output	C	Tracking bank switching output
59	NC			Not used
60	MIRR	Input		Mirror detector input
61	LOCK	Input		Spindle lock detector input
62	FOK	Input		FOK signal input
63	$\overline{HOME}$	Input		Home position detector input
64	NC			Not used

Pin No.	Pin Name	I/O	I/O Format	Function and Operation
65	LOAD	Output	C	Mechanism power supply control
66-68	I2-I0	Output	C	Motor driver control
69	OPTSW	Input		Digital output ON/OFF input
70	CDMUTE	Output	C	CD mute output
71	ADENA	Output	C	A/D reference voltage output
72	$\overline{\text{TESTIN}}$	Input		Test program mode input
73	VCC			Back up 5V
74	VREF	Input		A/D reference voltage input
75	AVSS			A/D GND
76	CSEL			Compression select
77	EJP			Eject position switch
78	DISK	Input		Disc detector input
79	TSEL	Input		Tray position detector photosensor
80	TOUTS	Input		Tray position detector switch

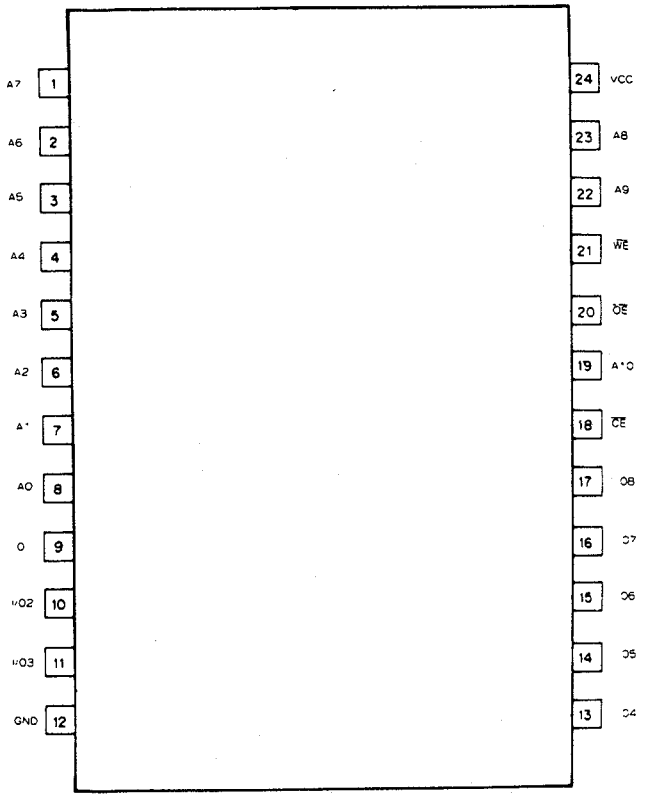
I/O Format	Meaning
C	CMOS output
NM	Middle resistivity N channel open drain

*IC751 : PD5180A

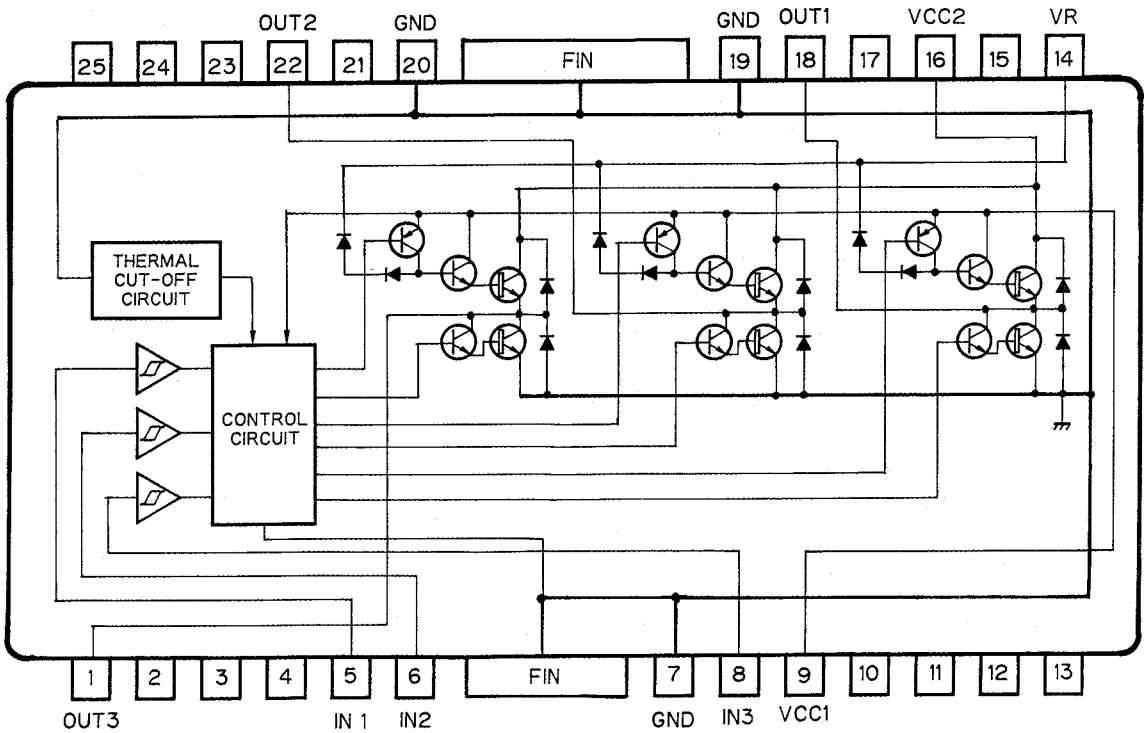

64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
65 LOAD(C)
66 I3(C)
67 I1(C)
68 I2(C)
69 OPTSW(C)
70 CDMUTE(C)
71 ADENA(C)
72 TESTIN(C)
73 VCC
74 VREF
75 AVSS
76 CSEL
77 EJP(A/D)
78 DISC(A/D)
79 TSEL(C)
80 TOUT(C)
( )HOME (C)FOK (C)LOCK (C)MIRR (C)QDC3 (C)TBC (C)HOLD (C)A0 (C)A1 (C)A2 (C)A3 (C)A4 (C)A5 (C)A6 (C)A7 (C)A8 (C)A9 (C)A10 (C)CS (C)PROT (C)WE (C)CONT (C)POWER
40 (C/C)D0
39 (C/C)D1
38 (C/C)D2
37 (C/C)D3
36 (C/C)D4
35 (C/C)D5
34 (C/C)D6
33 (C/C)D7
32 VSS
31 XOUT
30 XIN
29 (C)NC
28 (C)FECONT
27 RESET
26 CNVSS
25 MAG (INT)
1 TIN(C) 2 TEMP(A/D) 3 VMIN(A/D) 4 C/D(N) 5 DCS(N) 6 DRDY(C) 7 DRST(N) 8 A0(N) 9 XSCK(C/N) 10 XSO 11 XSI(C) 12 STB(C) 13 RST(C) 14 ENDOUT(C) 15 NC(C) 16 ASENS(C) 17 BSENS(INT) 18 BRST(INT) 19 BSRQ(C) 20 BRXEN(C/C) 21 BSCK(C/C) 22 BSO(C) 23 (BSI) BDATA(C) 24 EJSW(INT) D.CLOSE

*IC's marked by * are MOS type.*
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

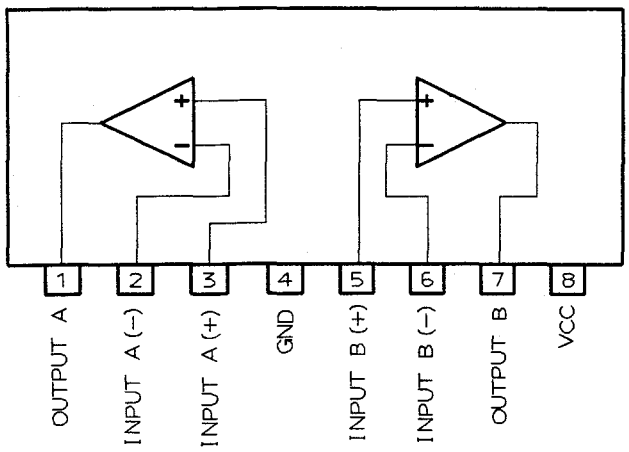
IC755 : LH5116HN-10T



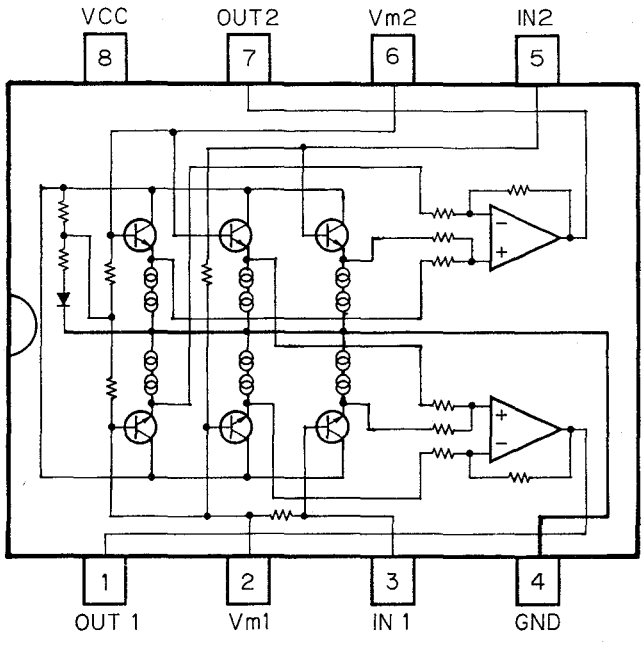
IC801 : XRA6247FP



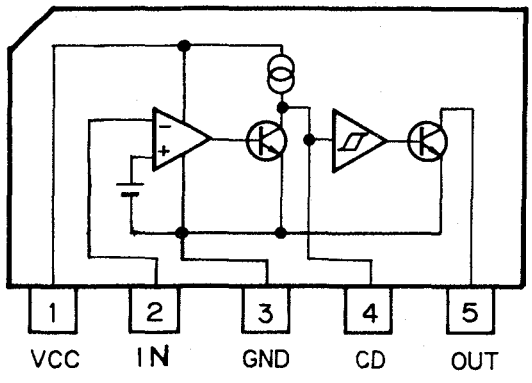
IC971 : M5218AL



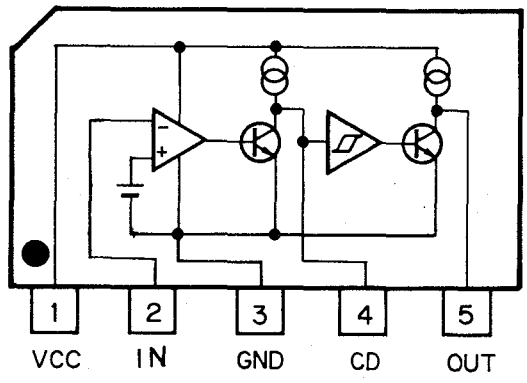
IC972 : BA3121



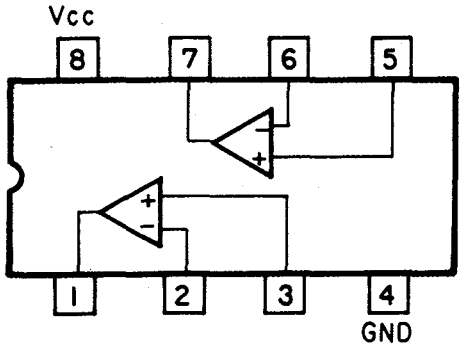
IC981 : M51957AL



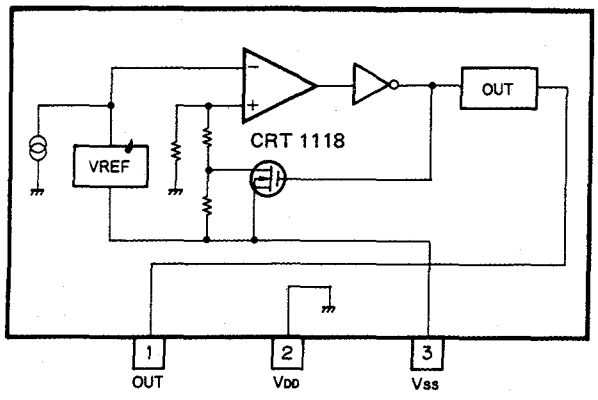
IC982 : M51958AL



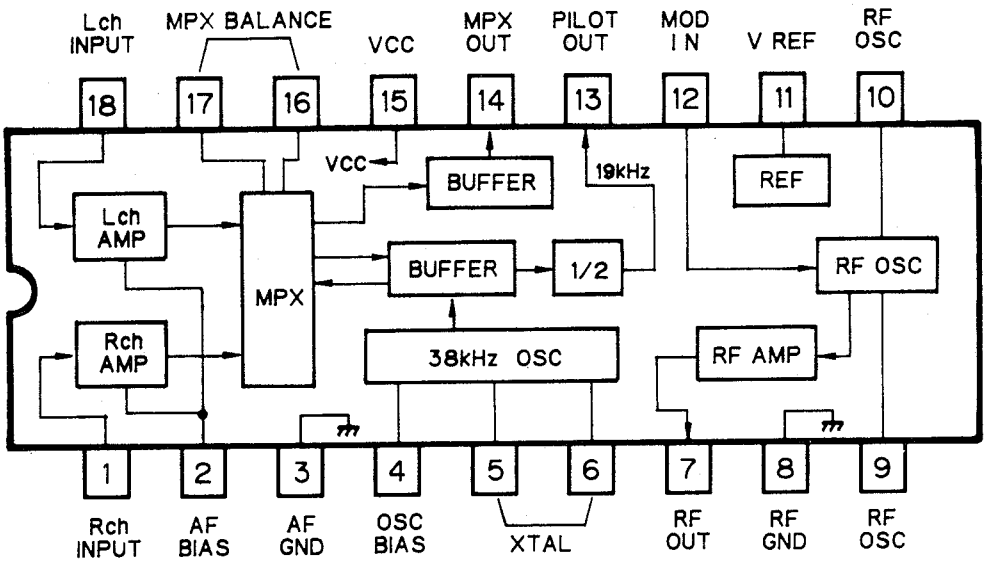
UPC4570G



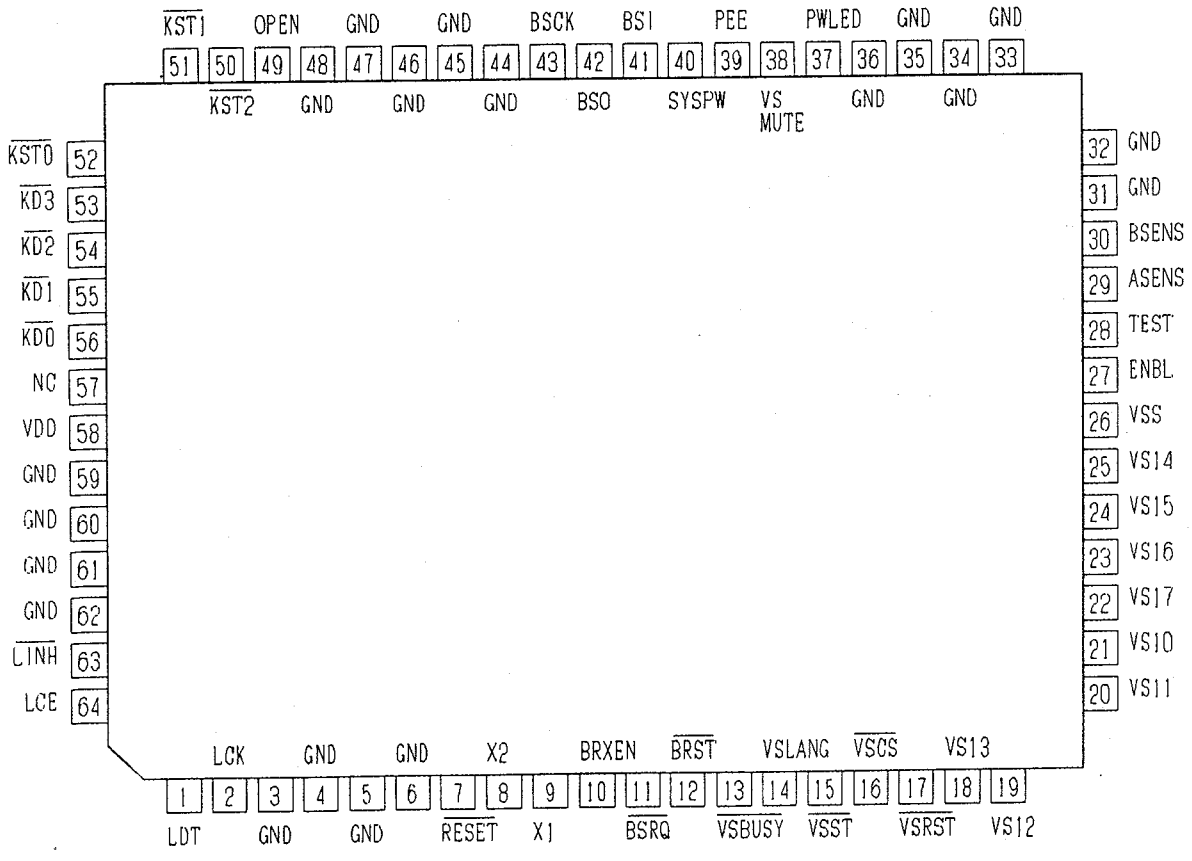
S-8053ANO



BA1404F



*PD4267A


KST1 OPEN GND GND BSCK BSI PEE PWLED GND GND
51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33
KST2 GND GND GND BSO SYSPW VS MUTE GND GND
KST0 52
KD3 53
KD2 54
KD1 55
KD0 56
NC 57
VDD 58
GND 59
GND 60
GND 61
GND 62
LINH 63
LCE 64
32 GND
31 GND
30 BSENS
29 ASENS
28 TEST
27 ENBL
26 VSS
25 VS14
24 VS15
23 VS16
22 VS17
21 VS10
20 VS11
LCK GND GND X2 BRXEN BRST VSLANG VSCS VS13
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
LDT GND GND RESET X1 BSRQ VSBUSY VSST VSRST VS12

● Pin Functions(PD4267A)

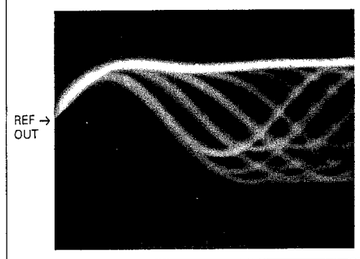
Pin	Pin name	I/O	Output Format	Function
1	LDT	output	C	LCD driver data output
2	LCK	output	C	LCD driver clock output
3-6	GND	input		GND
7	$\overline{\text{RESET}}$	input		Reset
8	X2			Oscillator
9	X1			Oscillator
10	BRXEN	input/ output	C	Bus reception enable output input/output
11	$\overline{\text{BSRQ}}$	input		Bus
12	$\overline{\text{BRST}}$	output	C	
13	$\overline{\text{VSBUSY}}$	input		Connect to VDD
14	VSLANG	output	C	Not used
15	$\overline{\text{VSST}}$	output	C	Not used
16	$\overline{\text{VSCS}}$	output	C	Not used
17	$\overline{\text{VSRST}}$	output	C	Not used
18 | 21	VS13 | VS10	output	C	Not used
22 | 25	VS17 | VS14	output	C	Not used
26	VSS			GND
27	ENBL			Test program inable input
28	TEST			Test program input
29	ASENS			ACC sense input
30	BSENS			Back-up sense input
31-36	GND			
37	PWLED	output	C	Not used
38	VSMUTE	output	C	Not used
39	PEE	output	C	Not used
40	SYSPW	output	C	System power output
41	BSI	input		Bus serial data input
42	BSO	output	C	Bus serial data output
43	BSCK	input/ output	C	Bus serial clock input/output
44-48	GND			
49	OPEN	output	NM	
50 | 52	$\overline{\text{KST2}}$ | $\overline{\text{KST0}}$	output	NM	Key strobe output
53 | 56	KD3 | KD0	input		Key return input
57	NC			
58	VDD			Power supply
59-62	GND			
63	$\overline{\text{LINH}}$	output	C	LCD driver display inhibit output
64	LCE	output	C	LCD driver chip inable output

Output Format	Meaning
C	C-MOS
NM	Neutral resistivity N channel open drain

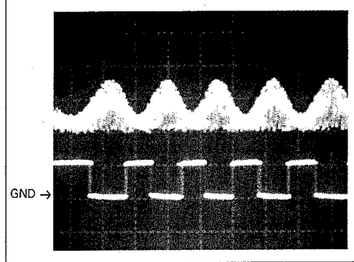
Note: 1. The encircled numbers denote measuring pointes in the circuit diagram.
2. Reference voltage
REFOUT: 2.5V

• Wave Forms

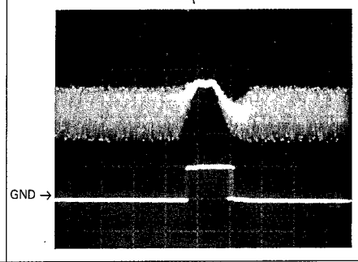
① RFO 0.5V/div. 0.2µs/div.
Normal mode: play



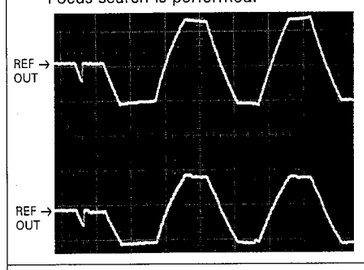
① CH1: RFO 1V/div. 0.5ms/div.
② CH2: MIRR 5V/div.
Test mode: Tracking open



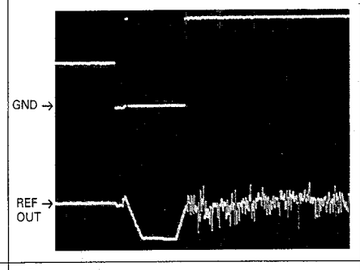
① CH1: RFO 1V/div. 0.5ms/div.
② CH2: MIRR 5V/div.
Normal mode: The defect part passes 800µm.



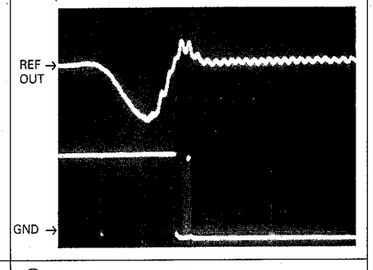
③ CH1: FIN 1V/div. 0.5s/div.
④ CH2: FOUT+ 2V/div.
Test mode: Connect the FEX to REFOUT.
Focus search is performed.



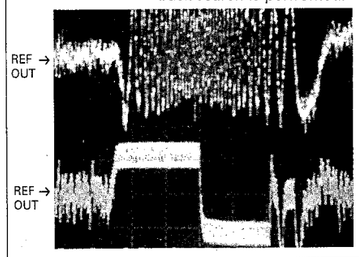
⑤ CH1: FOK 2V/div. 0.5s/div.
③ CH2: FIN 0.5V/div.
Normal mode: Focus close



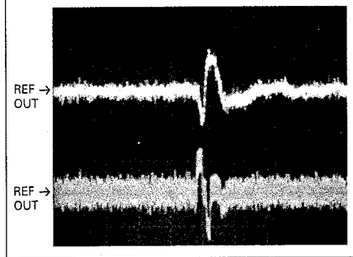
⑥ CH1: FEY 1V/div. 2ms/div.
⑦ CH2: XSO 2V/div.
Normal mode: Focus close
(The lens moves DOWN → UP)



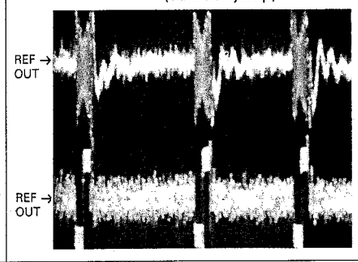
⑧ CH1: TEY 0.5V/div. 0.5ms/div.
⑨ CH2: TIN 0.5V/div.
Normal mode: Brake wave from when track search is perfromed.



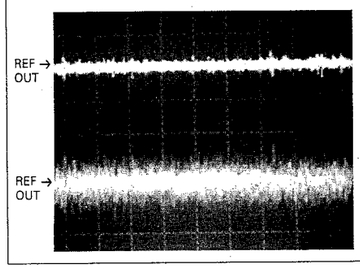
⑧ CH1: TEY 1V/div. 1ms/div.
⑨ CH2: TIN 0.5V/div.
Normal mode: single jump



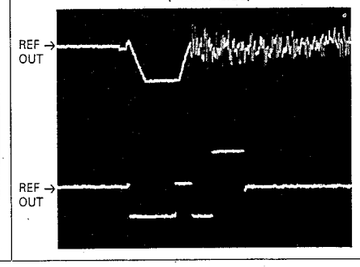
⑧ CH1: TEY 0.5V/div. 5ms/div.
⑨ CH2: TIN 0.5V/div.
Normal mode: Track search (32 track jump)



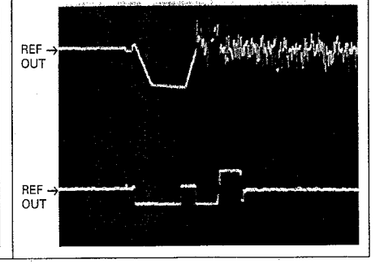
⑥ CH1: FEY 0.2V/div. 20ms/div.
③ CH2: FIN 0.5V/div.
Normal mode: Play



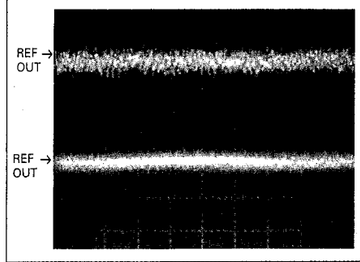
③ CH1: FIN 0.5V/div. 0.5s/div.
⑩ CH2: SIN 1V/div.
Normal mode: Focus search (12cm disc)



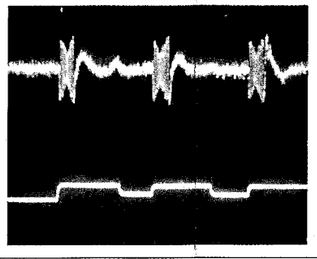
③ CH1: FIN 0.5V/div. 0.5s/div.
⑩ CH2: SIN 1V/div.
Normal mode: Focus search (8cm disc)



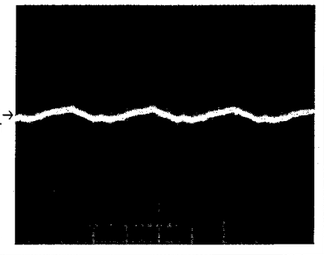
⑧ CH1: TEY 0.5V/div.
⑨ CH2: TIN 0.5V/div. 20ms/div.
Normal mode: Play



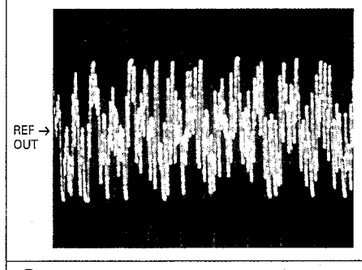
⑧ CH1: TEY 1V/div. 5ms/div.
㉓ CH2: CIN
Normal mode: Search



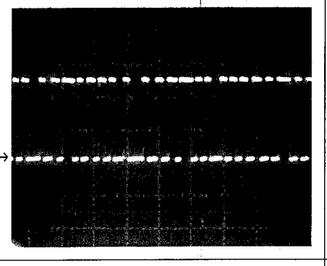
⑩ SIN 0.5V/div. 50ms/div.
Normal mode: Play (12cm disc)



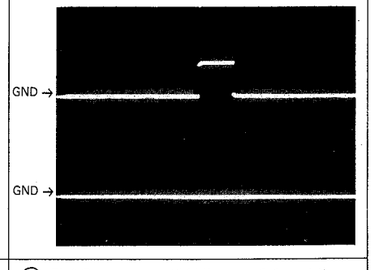
⑩ SIN 0.5V/div. 10ms/div.
Search (12cm disc)



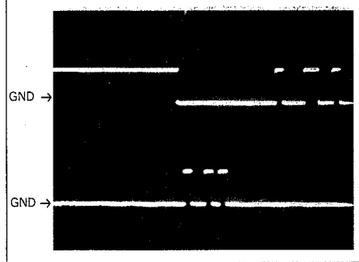
⑪ EFM 2V/div. 5µs/div.
Play



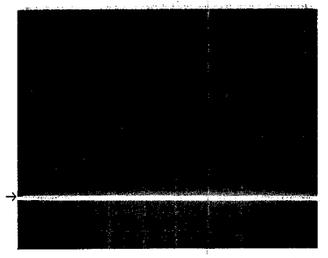
⑫ CH1: MDF 5V/div. 2ms/div.
⑬ CH2: MDR 5V/div.
Play



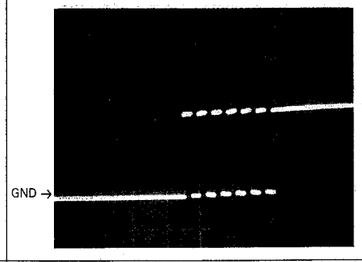
⑫ CH1: MDF 5V/div. 10ms/div.
⑬ CH2: MDR 5V/div.
Search



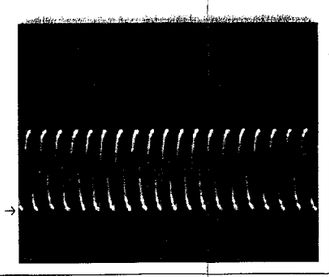
⑭ FLAG 2V/div. 0.1ms/div.
Play



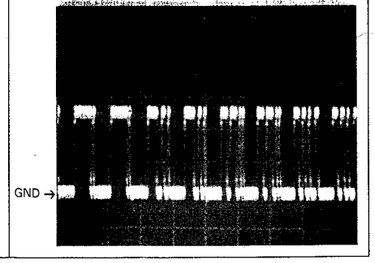
⑭ FLAG 2V/div. 0.1ms/div.
Search



⑯ SCKO 2V/div. 1µs/div.
Play

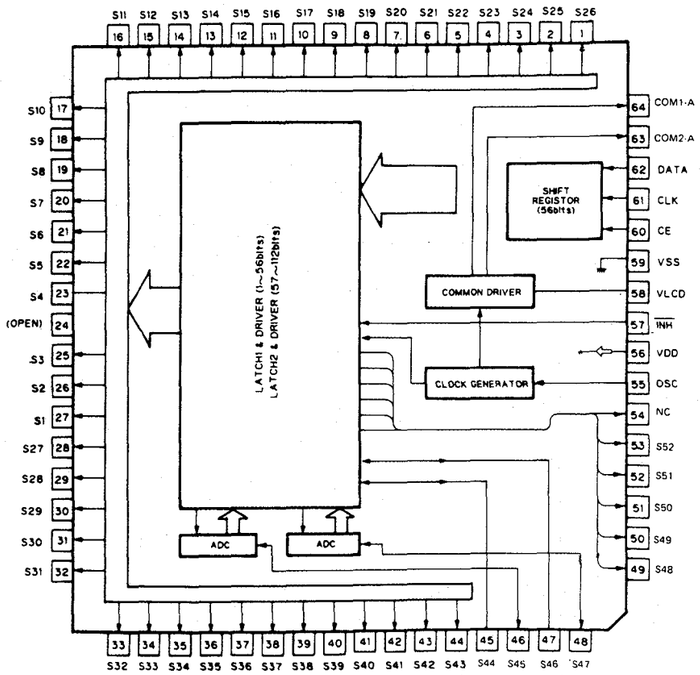


⑰ Dout 2v/div. 10µs/div.
Play



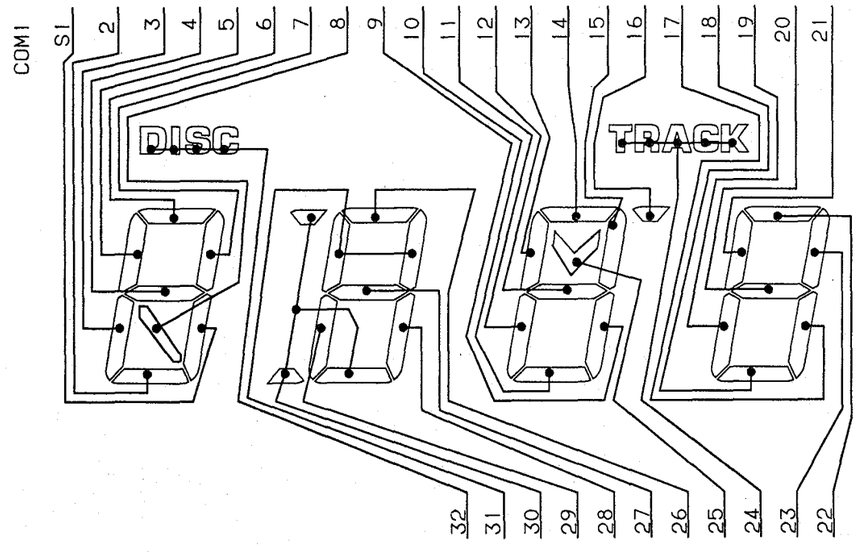
*LC4582A

*IC's marked by * are MOS type.*
Be careful in handling them because they are very liable to be damaged by electrostatic induction.



● LCD:CAW1092

SEGMENT

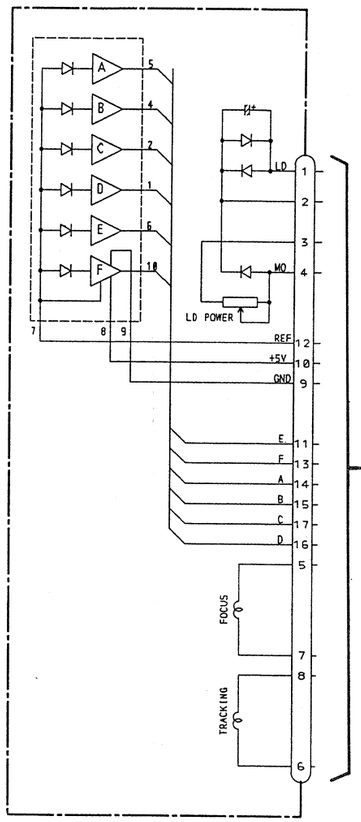


⑱ LRCK 2V/div. 20µs/div. Play GND →	㉑ CH1: L 1V/div. ㉒ CH2: R 1V/div. 0.2ms/div. Play (1kHz) GND → GND →	

9. CONNECTION DIAGRAM (1)

● Changer Assy

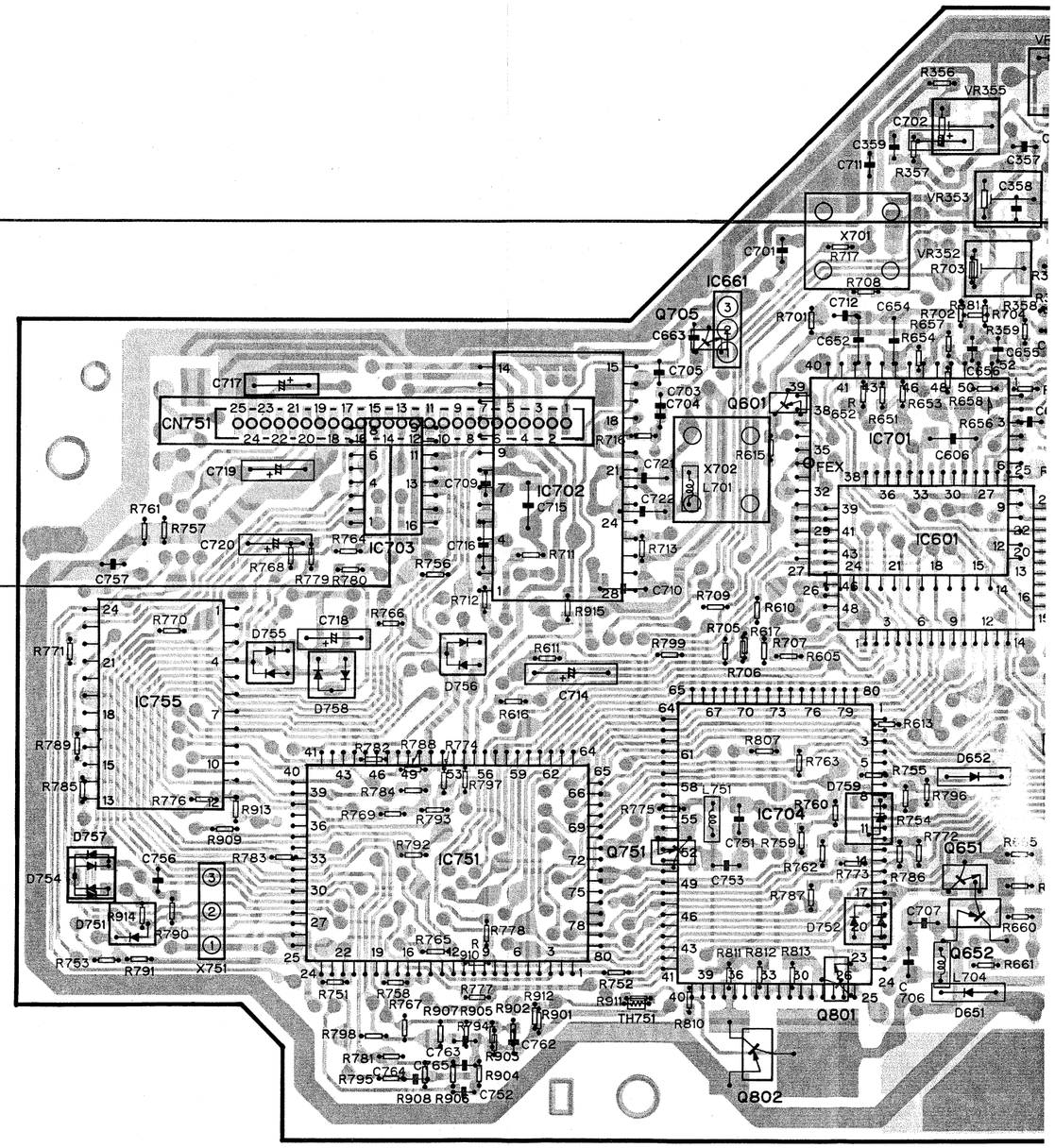
PU UNIT



TO EXTENSION UNIT

MAIN UNIT

IC, Q	IC755	IC703 IC751	IC702	Q705 Q802 Q601 Q751 IC661 IC704 Q801	IC701	Q651 IC601 Q652
ADJ						VR355 VR353 VR352



Q601 Q651 IC351
704 Q801 IC701 IC601 Q652 IC652 Q653 IC602 Q803 IC651 IC801 Q351
VR355 VR353 VR356 VR351
VR352 VR354

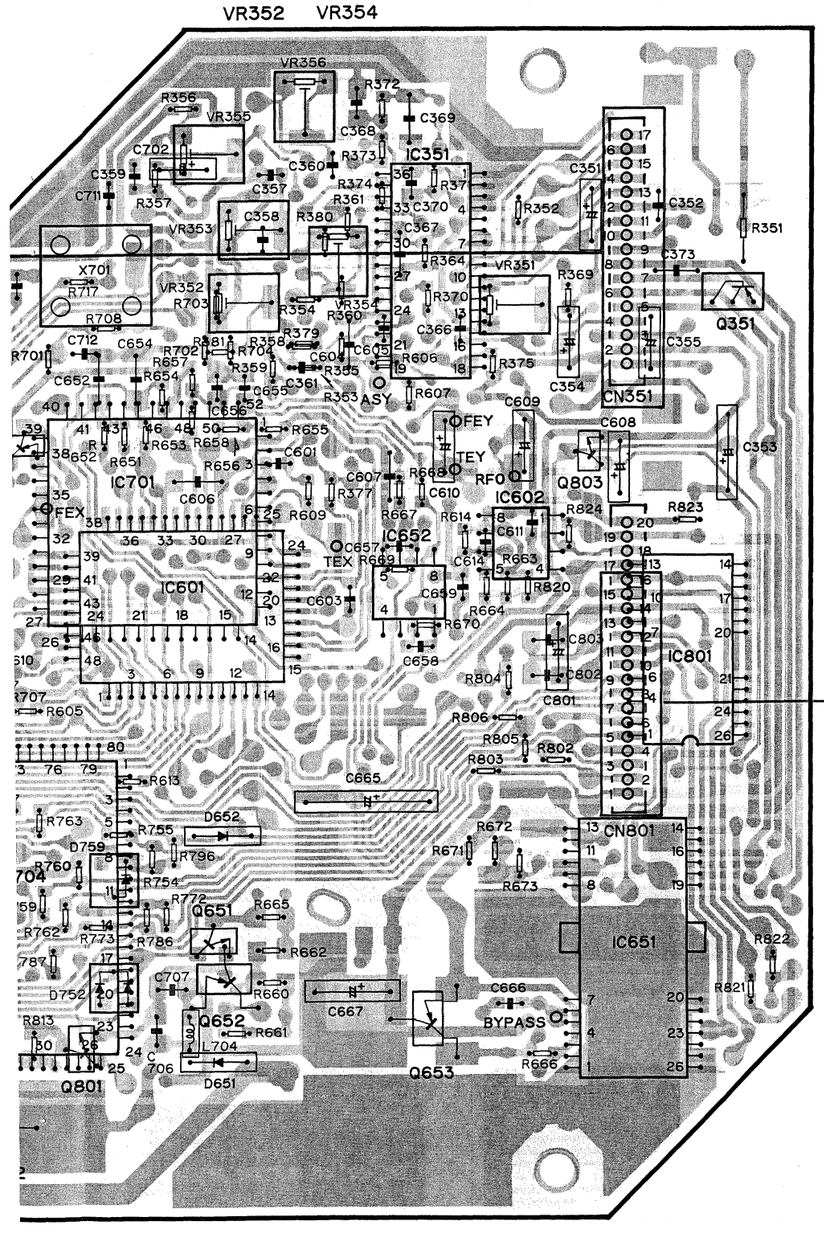
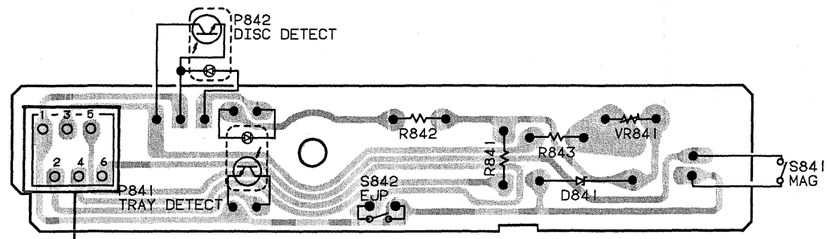


PHOTO P.C. BOARD



MECHANISM P.C. BOARD

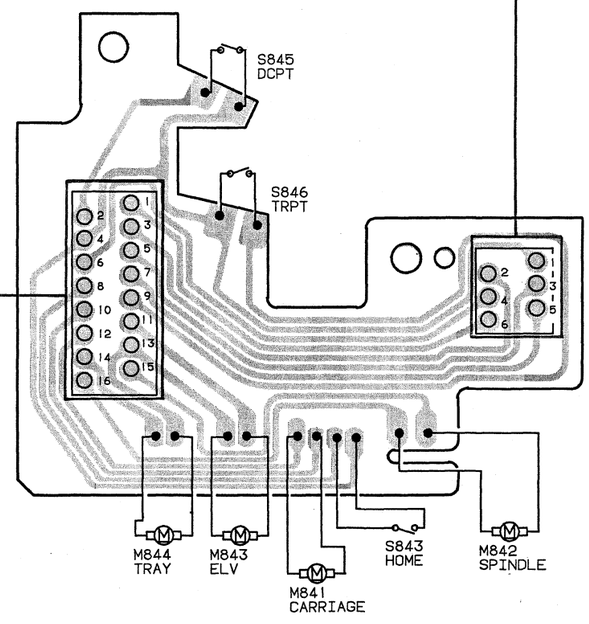
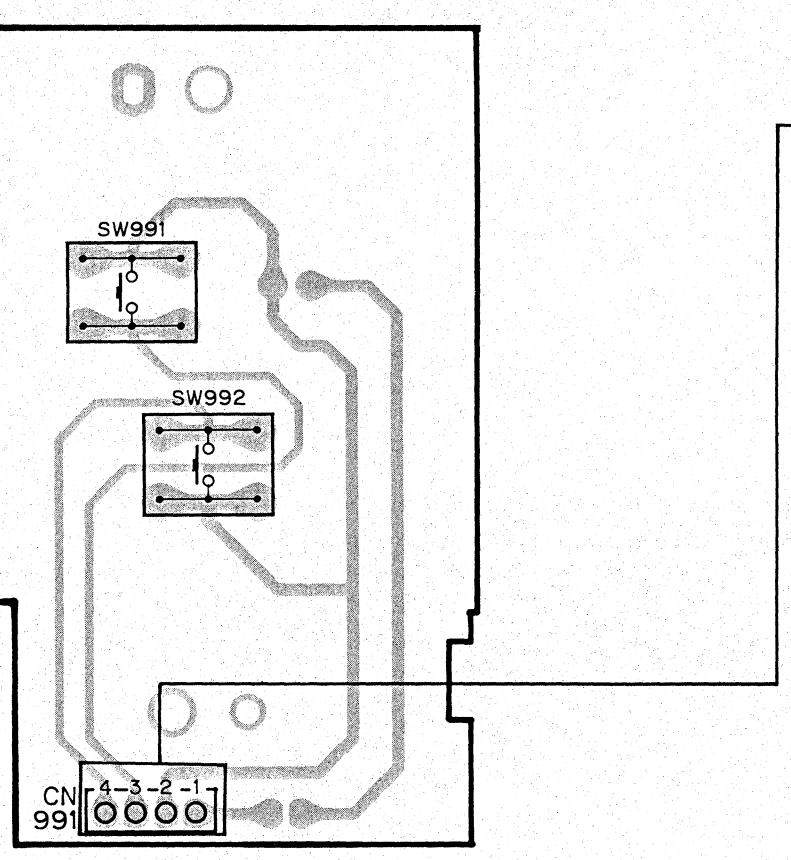


Fig. 33

NNECTION DIAGRAM (2)

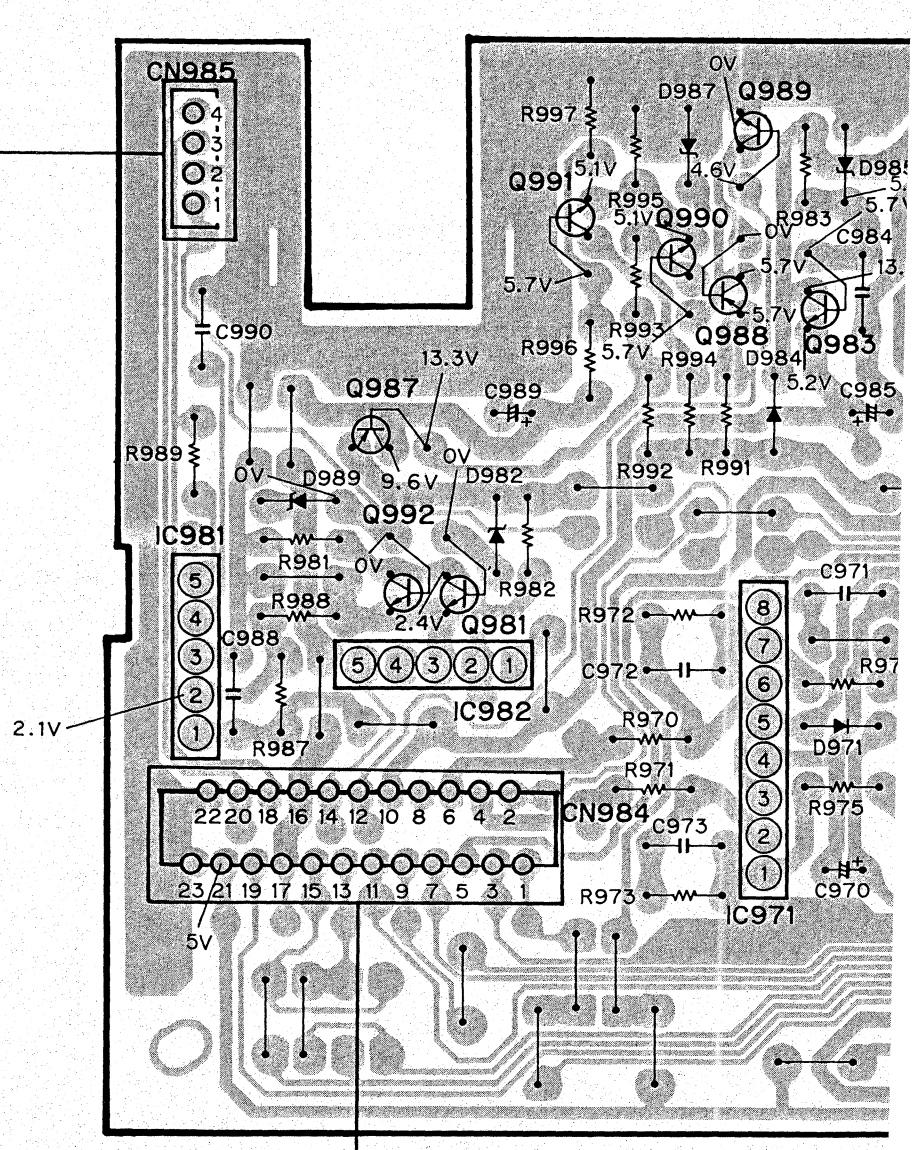
Assy

KEY UNIT



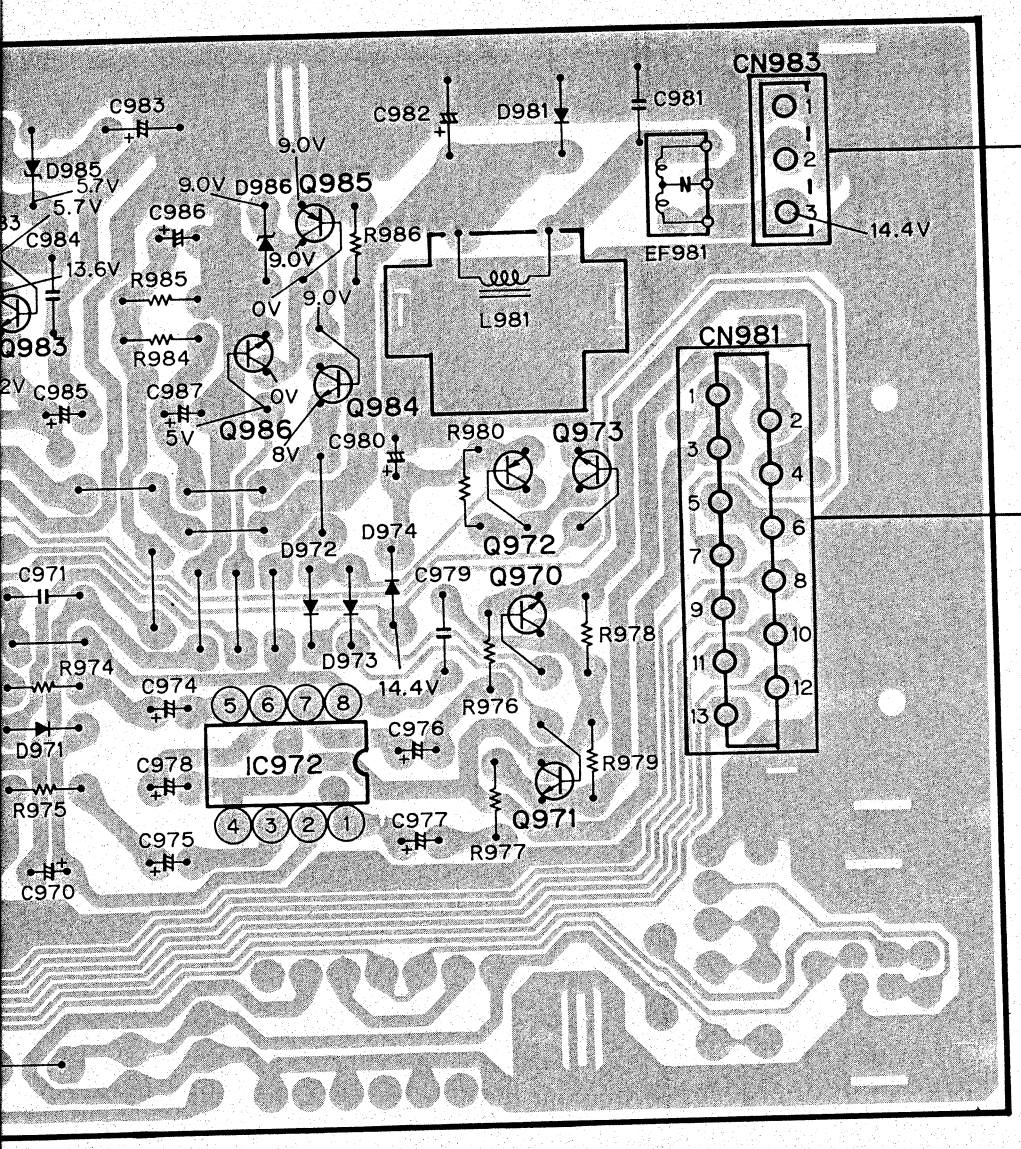
EXTENSION UNIT

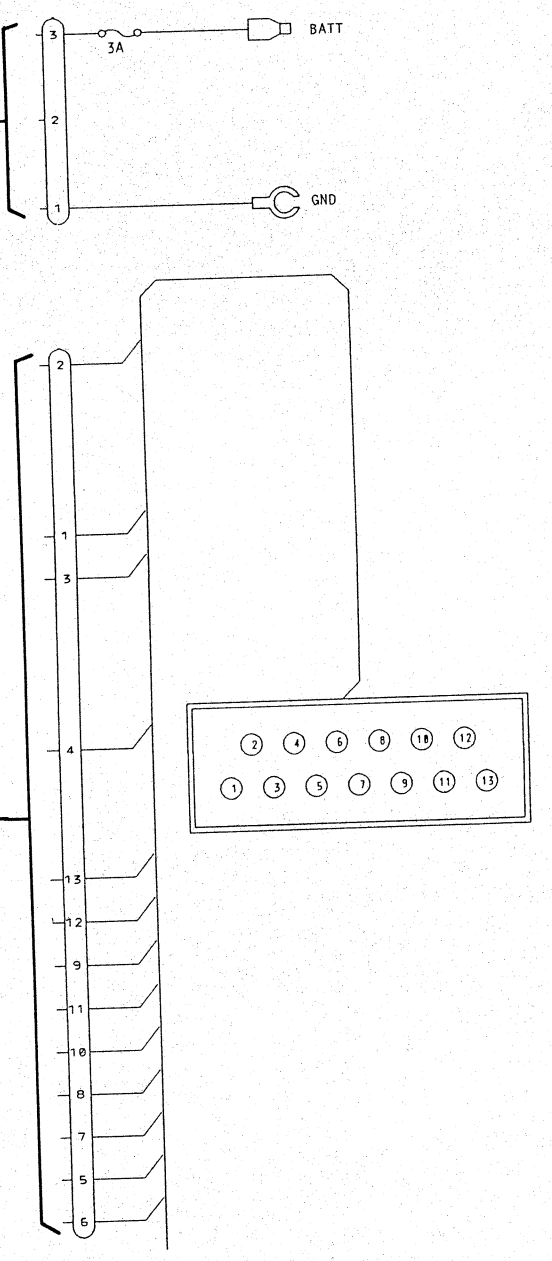
IC. Q IC981 Q992 IC982 Q987 Q981 Q991 IC971 Q990 Q989 Q988 Q983



TO MAIN UNIT

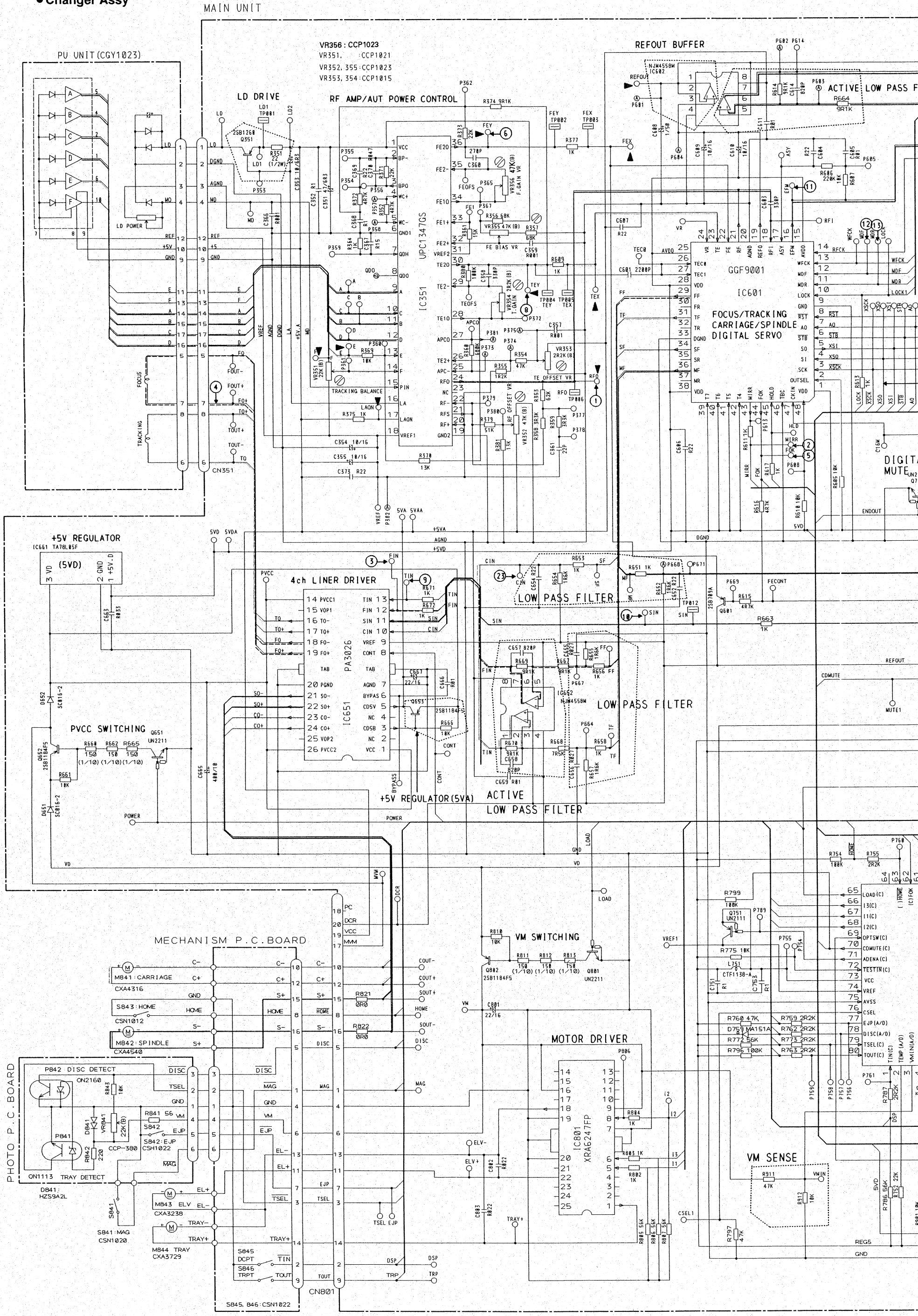
IC972 Q985 Q970 Q971
Q986 Q984 Q972 Q973



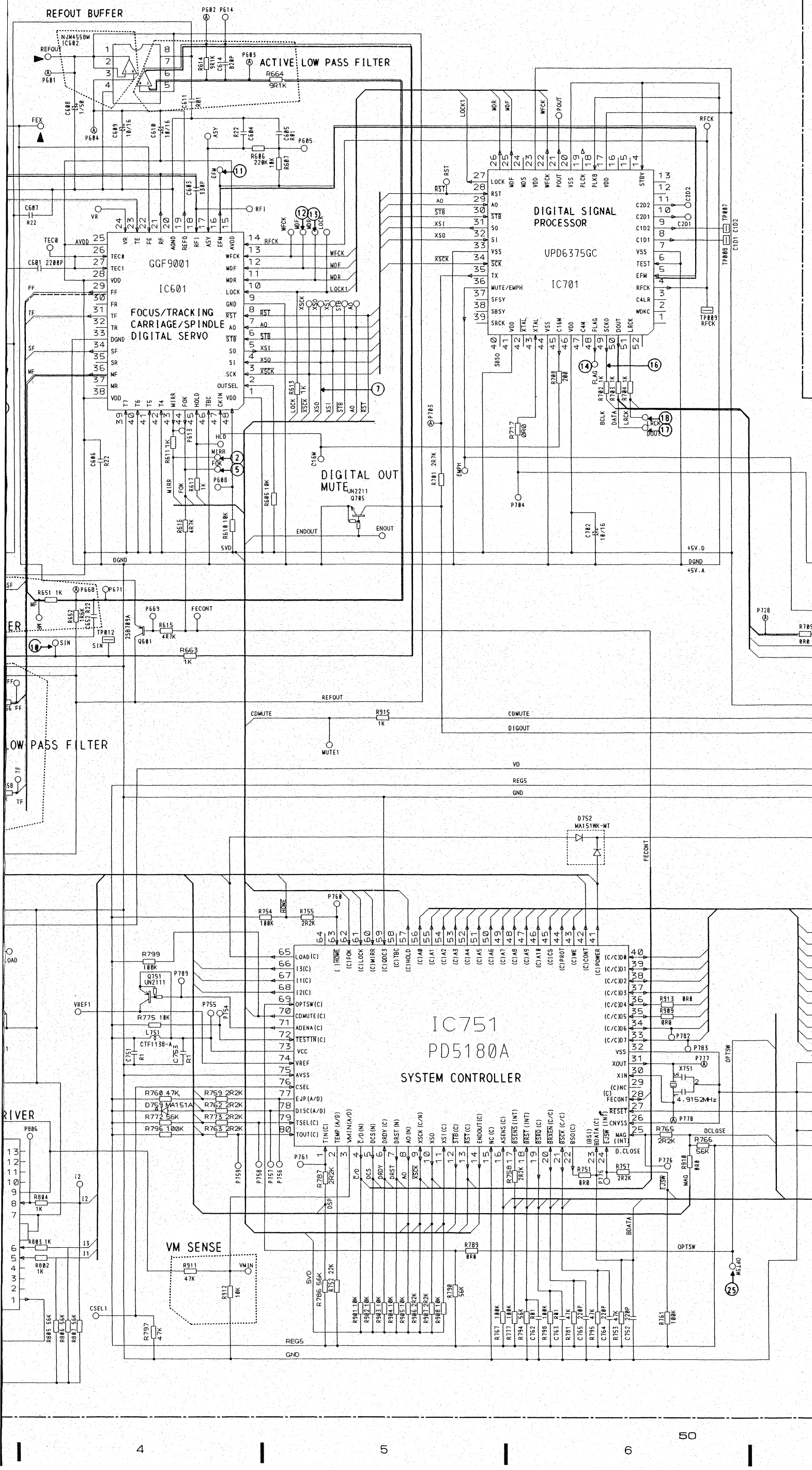


10. SCHEMATIC CIRCUIT DIAGRAM (1)

● **Changer Assy**



Bower 3917



SWITCHES:
MECHANISM P.C.BOARD
S845: DCPN SWITCH ····ON-OFF
S846: TRPN SWITCH ····ON-OFF
PHOTO P.C.BOARD
S841: MAG SWITCH ···· ON-OFF
S842: EJP SWITCH ···· ON-OFF
MISCELLANEOUS
S843: HOME SWITCH ····ON-OFF

The underlined indicates the switch positio

NOTE:
Symbol indicates a resistor.
No differentiation is made between chip resistors an
discrete resistors.

Symbol indicates a capacitor.
No differentiation is made between chip capacitors a
discrete capacitors.

SIGNAL LINE
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE

SWITCHES:
MECHANISM P.C.BOARD
S845: DCPN SWITCH ···· ON-OFF
S846: TRPN SWITCH ···· ON-OFF
PHOTO P.C.BOARD
S841: MAG SWITCH ···· ON-OFF
S842: EJP SWITCH ···· ON-OFF
MISCELLANEOUS
S843: HOME SWITCH ···· ON-OFF

The underlined indicates the switch position.

NOTE:
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

DIGITAL SIGNAL PROCESSOR
UPD6375GC
IC701

DIGITAL FILTER/ DA CONVERTER
IC702 TC9237F

ANALOG FILTER
IC703 TA2009F

SRAM
IC755 LH5116HN-10T

IC751
PD5180A
SYSTEM CONTROLLER

TO EXTENSION UNIT
CN751

Fig. 34

12. SCHEMATIC CIRCUIT DIAGRAM (2)

● **Changer Assy**

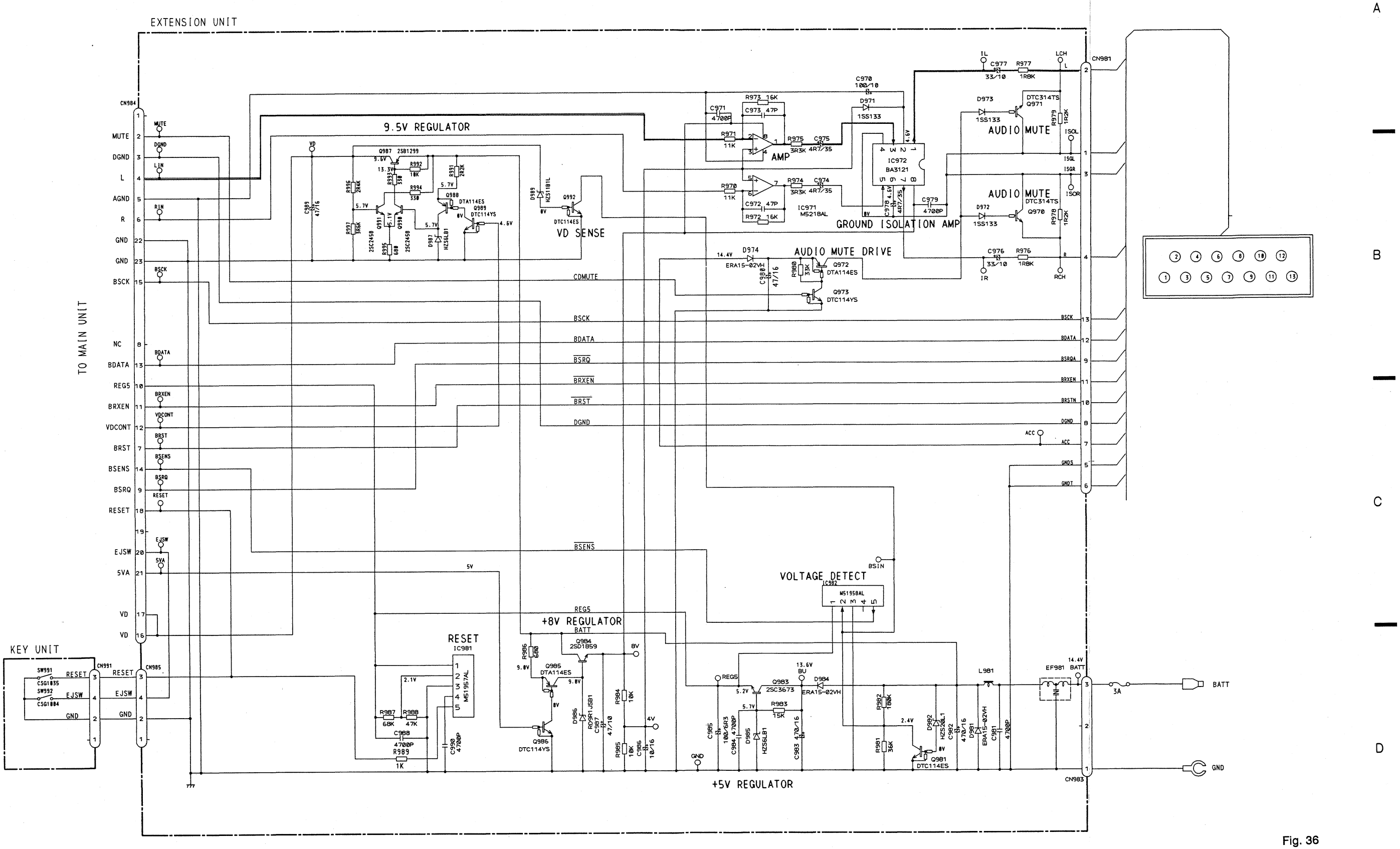
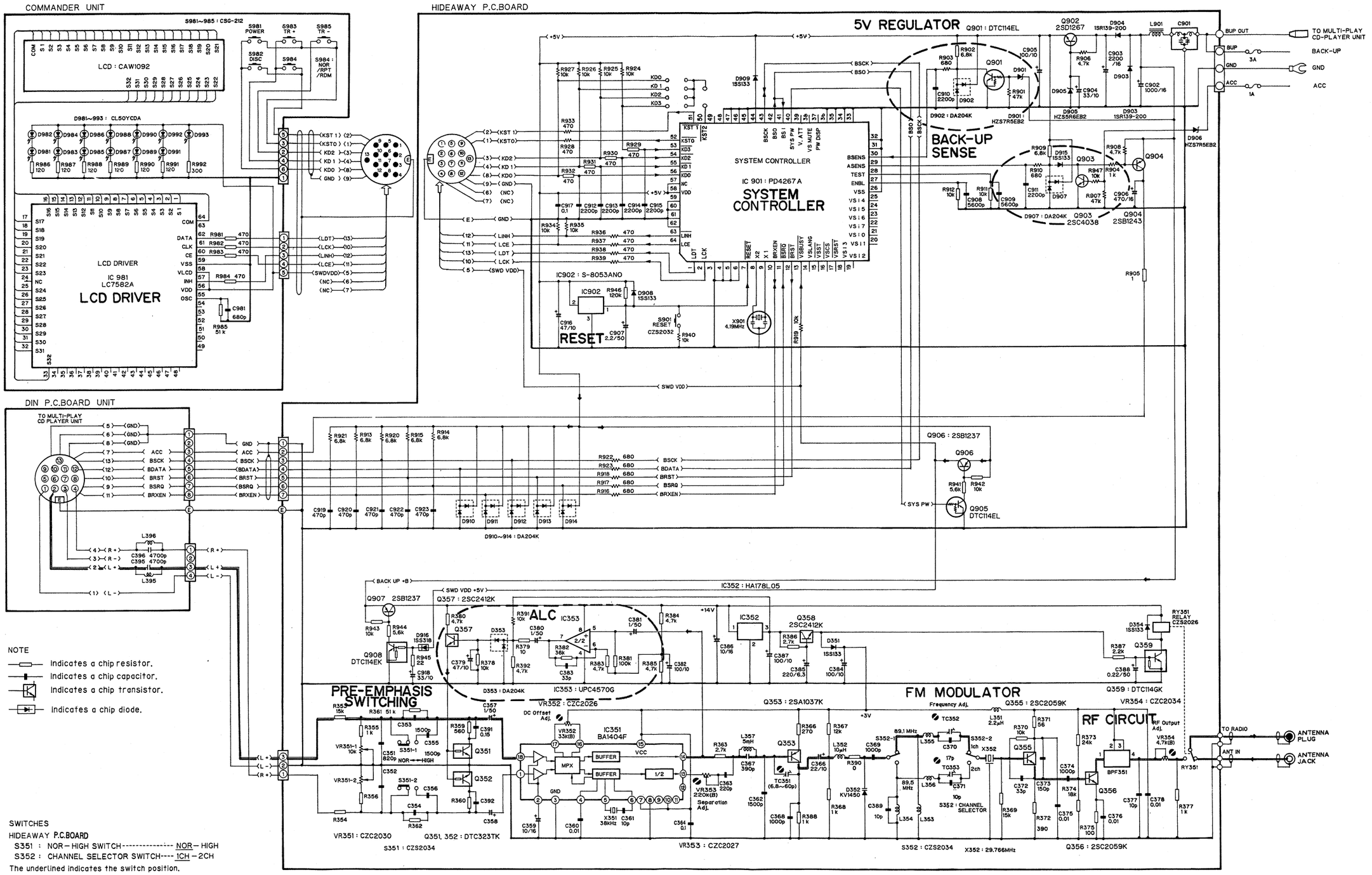


Fig. 36

13. SCHEMATIC CIRCUIT DIAGRAM (3)

● Control Assy



NOTE

- Indicates a chip resistor.
- Indicates a chip capacitor.
- Indicates a chip transistor.
- Indicates a chip diode.

SWITCHES

HIDEAWAY P.C.BOARD

S351 : NOR—HIGH SWITCH---------- NOR—HIGH

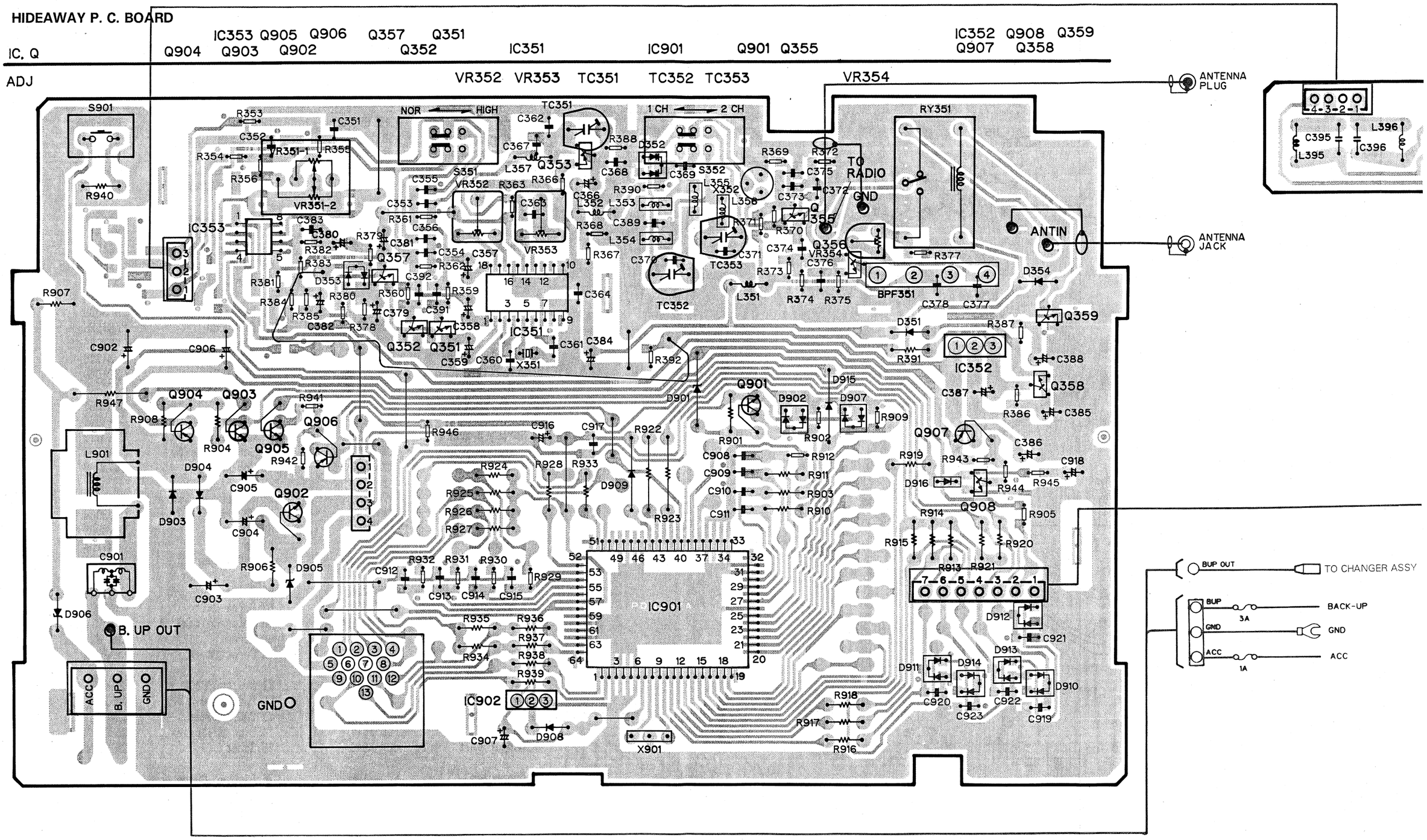
S352 : CHANNEL SELECTOR SWITCH---- 1CH—2CH

The underlined indicates the switch position.

Fig. 37

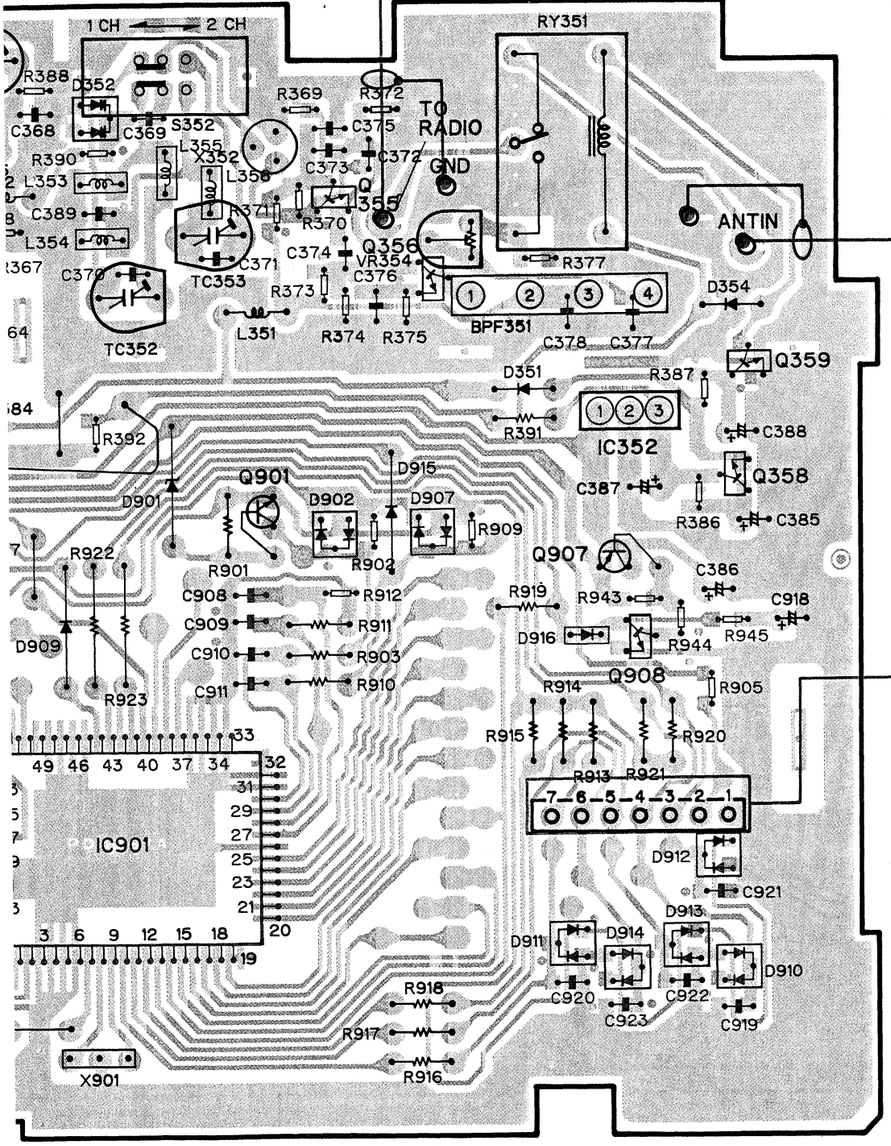
14. CONNECTION DIAGRAM (3)

● Control Assy



IC901 Q901 Q355 IC352 Q908 Q359 Q907 Q358

351 TC352 TC353 VR354



ANTENNA PLUG

ANTENNA JACK

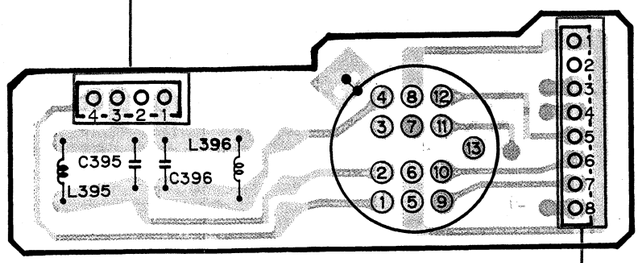
BUP OUT — TO CHANGER ASSY

BUP — 3A — BACK-UP

GND — GND

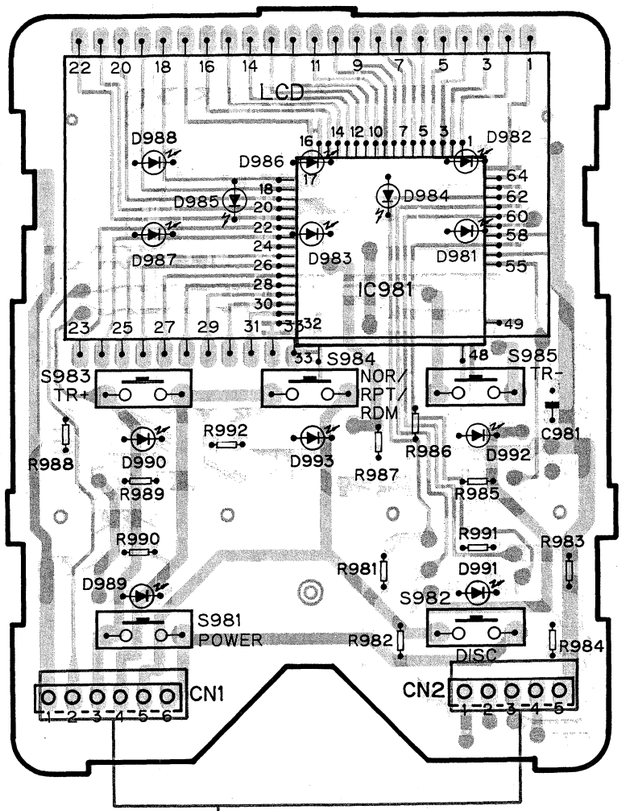
ACC — 1A — ACC

DIN P.C. BOARD UNIT



COMMANDER UNIT

IC IC981



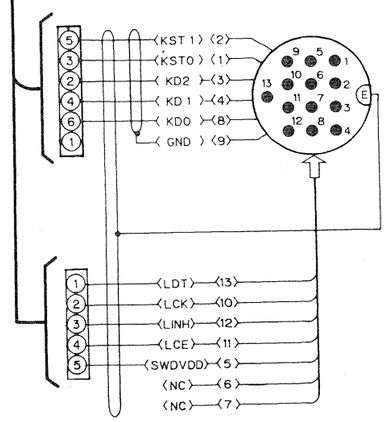


Fig. 38

15. CD MECHANISM UNIT EXPLODED VIEW

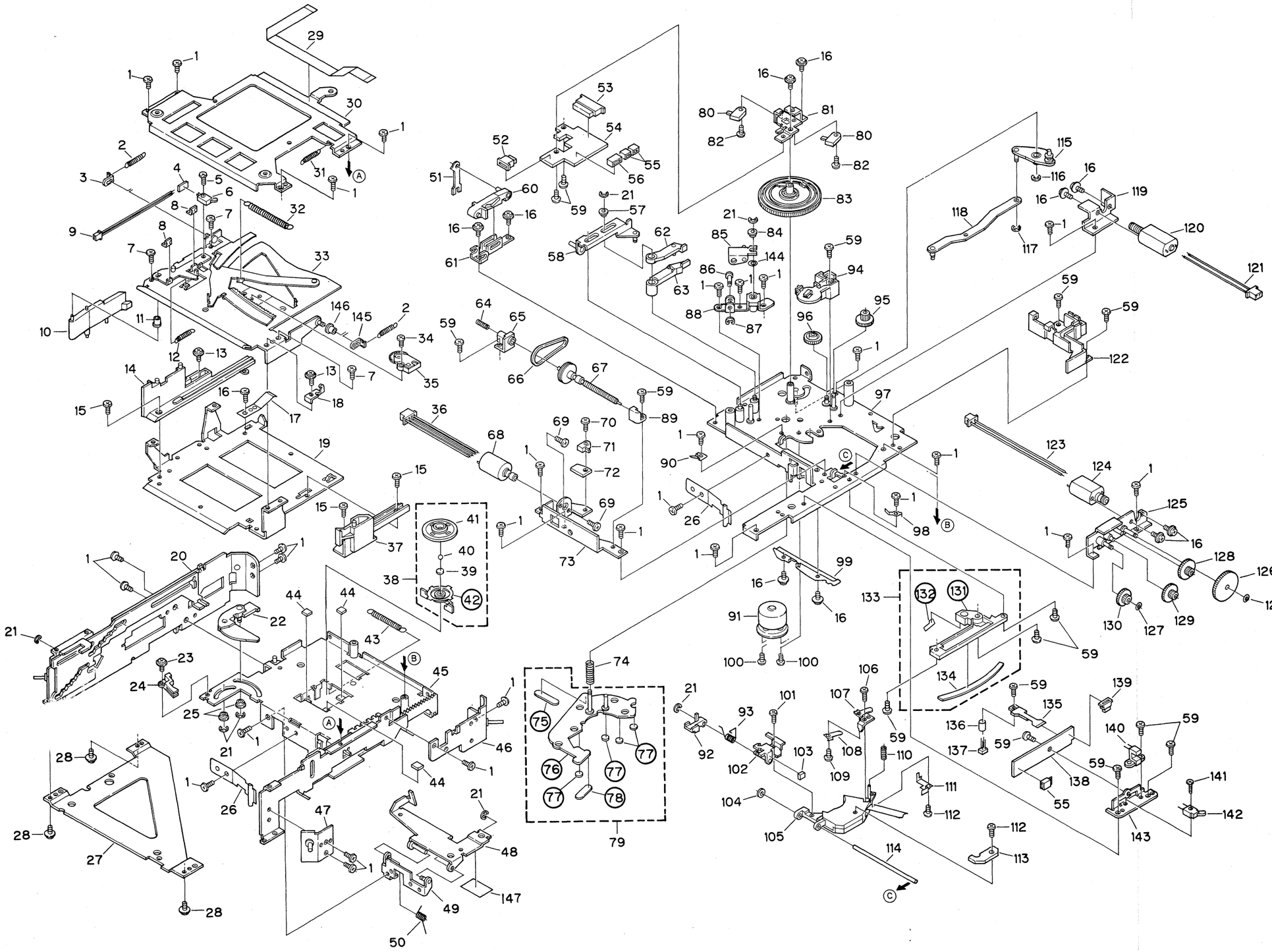


Fig. 39

NOTE:
- The pa subject
- Becaus not spa

● Parts L

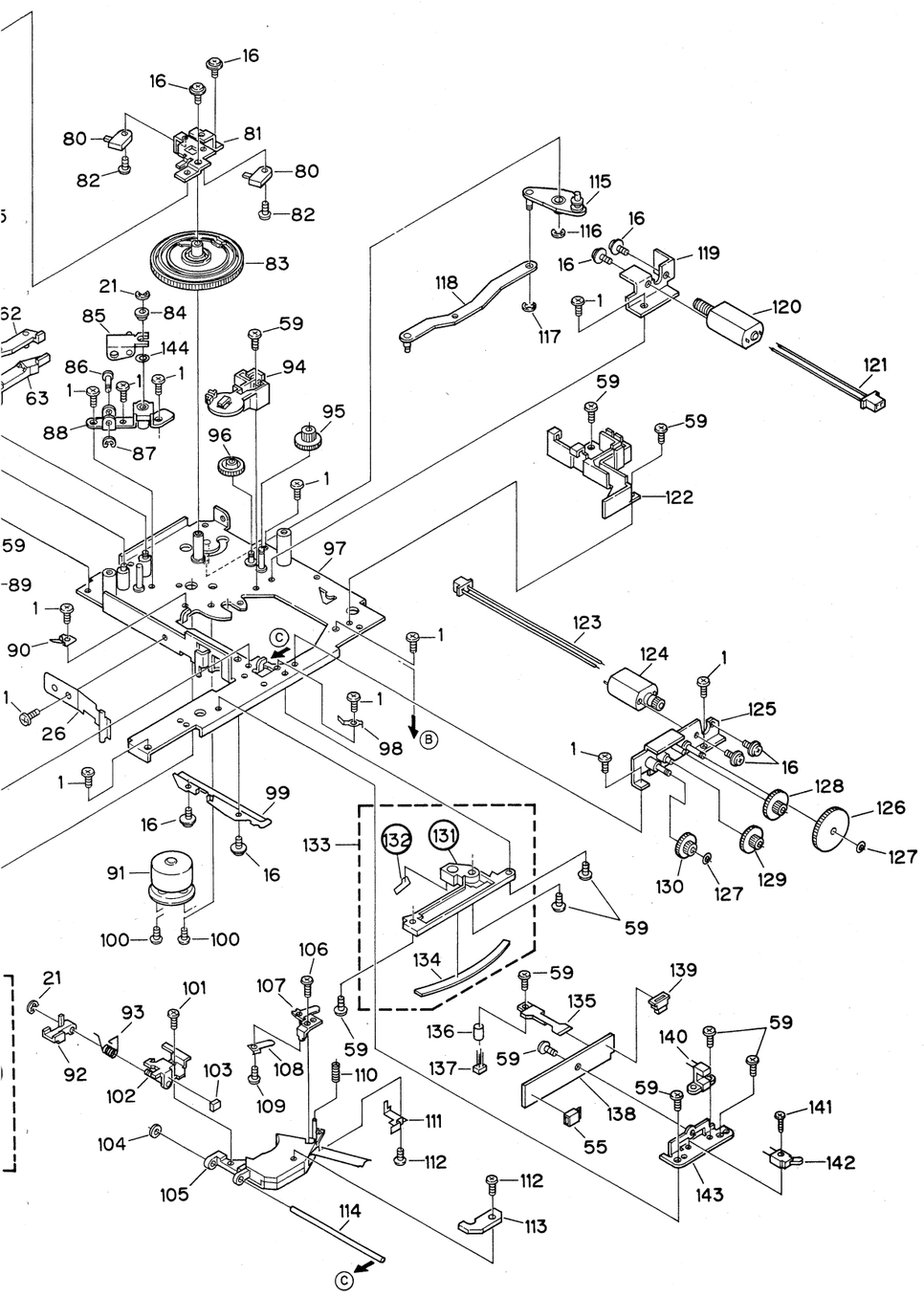


Fig. 39

NOTE:

- *The parts marked with "◉" may need long time to supply and their supply is subject to refuse as the case may be.*
- *Because the parts with encircled number shown on the dismantling drawing are not spare parts, we are unable to supply them in principle.*

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ26P030FMC	41	Guide	CNV2739
2	Holder Spring	CBH1324	42	Clamper Bracket Unit	CXA3237
3	Spring Holder	**CNC3054**	43	Spring	CBH1436
4	Gathering P.C.Board	CNX1840	44	Cushion	CNM2555
5	Screw(M1.7×5.5)	CBA1070	45	Lower Chassis Unit	CXA4372
6	Switch(S841)	CSN1020	46	Damper Bracket Unit	CXA4381
7	Spring(M2×3)	CBA1152	47	Damper Bracket Unit	CXA4376
8	Clamper	CNV2722	48	Clamper Arm Unit	CXA4958
9	Connector	CDE2701	49	Clamper Arm Bracket Unit	CXA4378
10	Lock Arm	CNV3215	50	Clamp Spring	CBH1321
11	Roller	CLA2034	51	Lever	CNC3038
12	Lock Spring	CBH1320	52	Plug(6P)	CKS1526
13	Screw	CBA1075	53	Plug	CKS1536
14	Magazine Guide	CNV2369	54	Gathering P.C.Board	CNX1778
15	Screw(M2×3)	CBA1077	55	Plug(2P)	CKS1049
16	Screw	PMS20P025FMC	56	Plug(4P)	CKS1051
17	Spring	CBL1145	57	Collar	CLA1846
18	Spring Bracket	CNC4323	58	Cam Lever Unit	CXA4012
19	Magazine Holder	CNC4287	59	Screw(M2.6×5)	CBA1180
20	Side Frame Unit	CXA4373	60	Cam Arm	CNV2736
21	Washer	YE15FUC	61	Cam Lever Bracket	CNC3682
22	Arm	CNV2352	62	SW Arm	CNV2964
23	Screw(M2×5)	CBA1080	63	SW Arm	CNV2959
24	Arm Guide	CNV2372	64	Spring	CBH1104
25	Roller	CLA1846	65	CRG Holder	CNV2961
26	Spring	CBL1134	66	Belt	CNT1053
27	Lower Frame	CNC3456	67	Screw Unit	CXA2375
28	Screw	PMS20P030FMC	68	Motor Unit(M841)	CXA4316
29	Connector	CDE3464	69	Screw	CBA-098
30	Upper Frame	CNC3960	70	Screw(M2×6)	CBA1004
31	Spring	CBH1466	71	Switch(S843)	CSN1012
32	EJ Spring	CBH1402	72	P.C.Board	CNP2803
33	Magazine Holder Unit	CXA4729	73	CRG Bracket	CNC3961
34	Screw	CBA1070	74	Disc UP Spring	CBH1442
35	Damper Unit	CXA3242	75	Sheet	CNM3241
36	Connector	CDE3466	76	Disc-up Guide Unit	CXA4377
37	Magazine Guide	CNV2734	77	Sheet	CNM3178
38	Clamper Bracket Assy	CXA4039	78	Sheet	CNM3241
39	Spacer	CNM1787	79	Disc-up Guide Assy	CXA4384
40	Ball	CNR1079	80	Switch(S845,846)	CSN1022

Mark	No.	Description	Part No.
	81	Cam Gear Bracket	CNC3964
	82	Screw(M2×5)	CBA1054
	83	Cam Gear	CNV2963
	84	Collar	CLA1977
	85	Disc UP Arm Unit	CXA4382
	86	Shaft	CLA1962
	87	Washer	YE20FUC
	88	Disc-up Bracket Unit	CXA4375
	89	CRG Holder	CNV2965
	90	Spring	CBL1135
	91	Motor Unit(M842)	CXA4540
	92	Rack	CNV2972
	93	Spring	CBH1432
	94	Guide	CNV2971
	95	Wheel	CNV2359
	96	Gear	CNV2360
	97	Main Chassis Unit	CXA4371
	98	Spring	CBL1133
	99	Cover	CNC3968
	100	Screw	HBA-258
	101	Screw(M2×3)	CBA1062
	102	CRG Holder Unit	CXA4379
	103	Spacer	CNT1052
	104	Cushion	CNV1863
	105	PU Unit	CGY1023
	106	Screw	JGZ20P070FNI
	107	Holder	CNC4073
	108	Spring	CBL1138
	109	Screw	JFZ14P016FNI
	110	Spring	CBH1430
	111	Holder Unit	CXA4675
	112	Screw	JFZ17P030FNI
	113	Weight	CNC4116
	114	Shaft	CLA1197
	115	Arm Unit	CXA3995
	116	Washer	YE20FUC
	117	Washer	YE25FUC
	118	Lever Unit	CXA3542
	119	TRY Bracket	CNC3963
	120	TRAY Motor Unit(M844)	CXA3729
	121	Connector	CDE3151
	122	Guide	CNV2958
	123	Connector	CDE3150
	124	Motor Unit(M843 ELV)	CXA3238
	125	ELV Bracket Unit	CXA4380
	126	Gear	CNV2962
	127	Washer	CBF1038
	128	Gear	CNV2363
	129	Gear	CNV2371
	130	Gear	CNV2364
	131	Disc Guide	CNV2966
	132	Sheet	CNM3179
	133	Disc Guide Assy	CXA4383
	134	Sheet	CNM2553
	135	P.C.Board	CNP2806
	136	Spacer	CNV2365
	137	Photo-interrupter(P842)	ON2160
	138	Gathering P.C.Board	CNX1780
	139	Plug(4P)	CKS1526
	140	Photo-interrupter(P841)	ON1113
	141	Screw(M1.7×6)	CBA1163
	142	Switch(S842 EJP)	CSH1022
	143	TSEL Bracket	CNC4072
	144	Washer	CBE1027
	145	Spring Holder	CNC3054
	146	Roller	CLA2036

16. CABINET EXPLODED VIEW

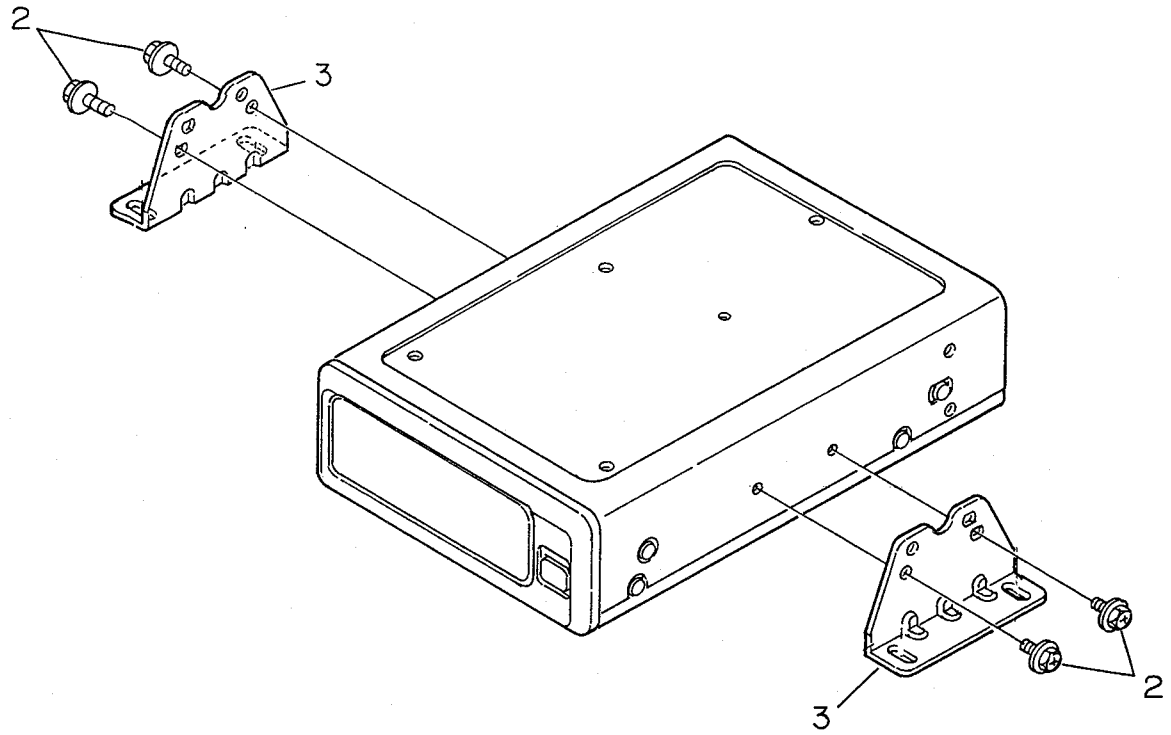


Fig. 40

Mark No.	Description	Part No.
1	.....	
2	Screw	HMF40P080FZK
3	Angle	CNB1634

17. CHASSIS EXPLODED VIEW

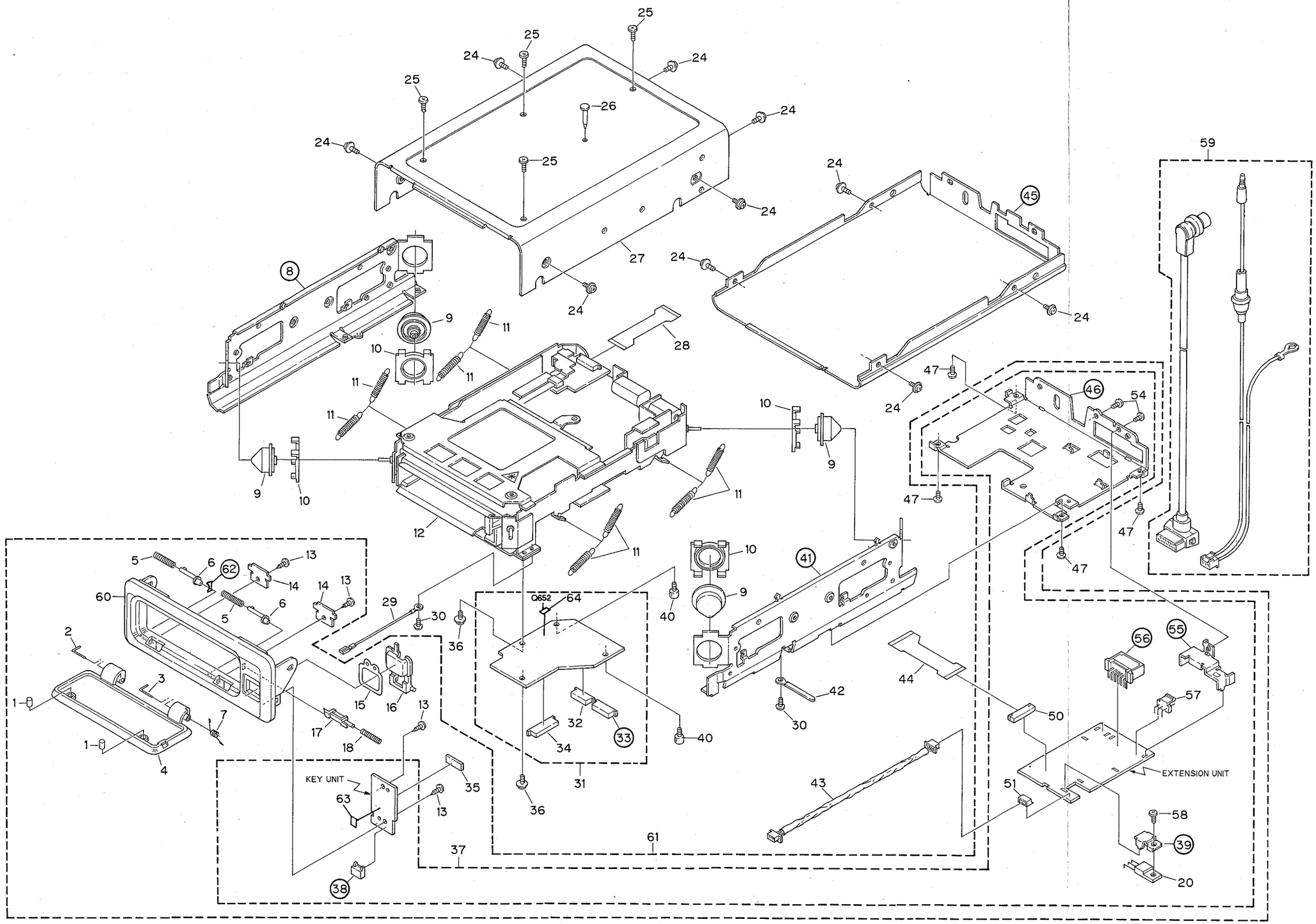


Fig. 41

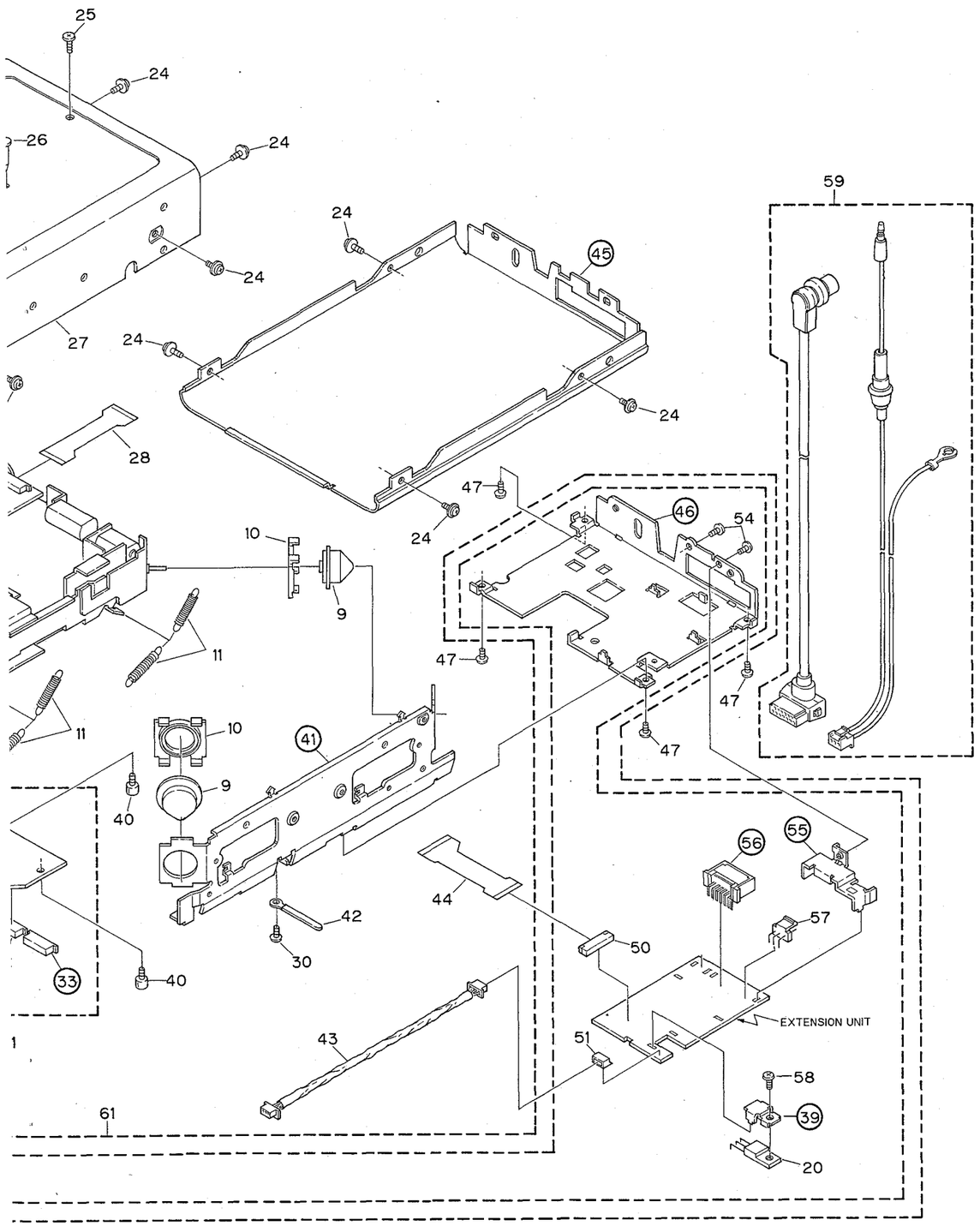
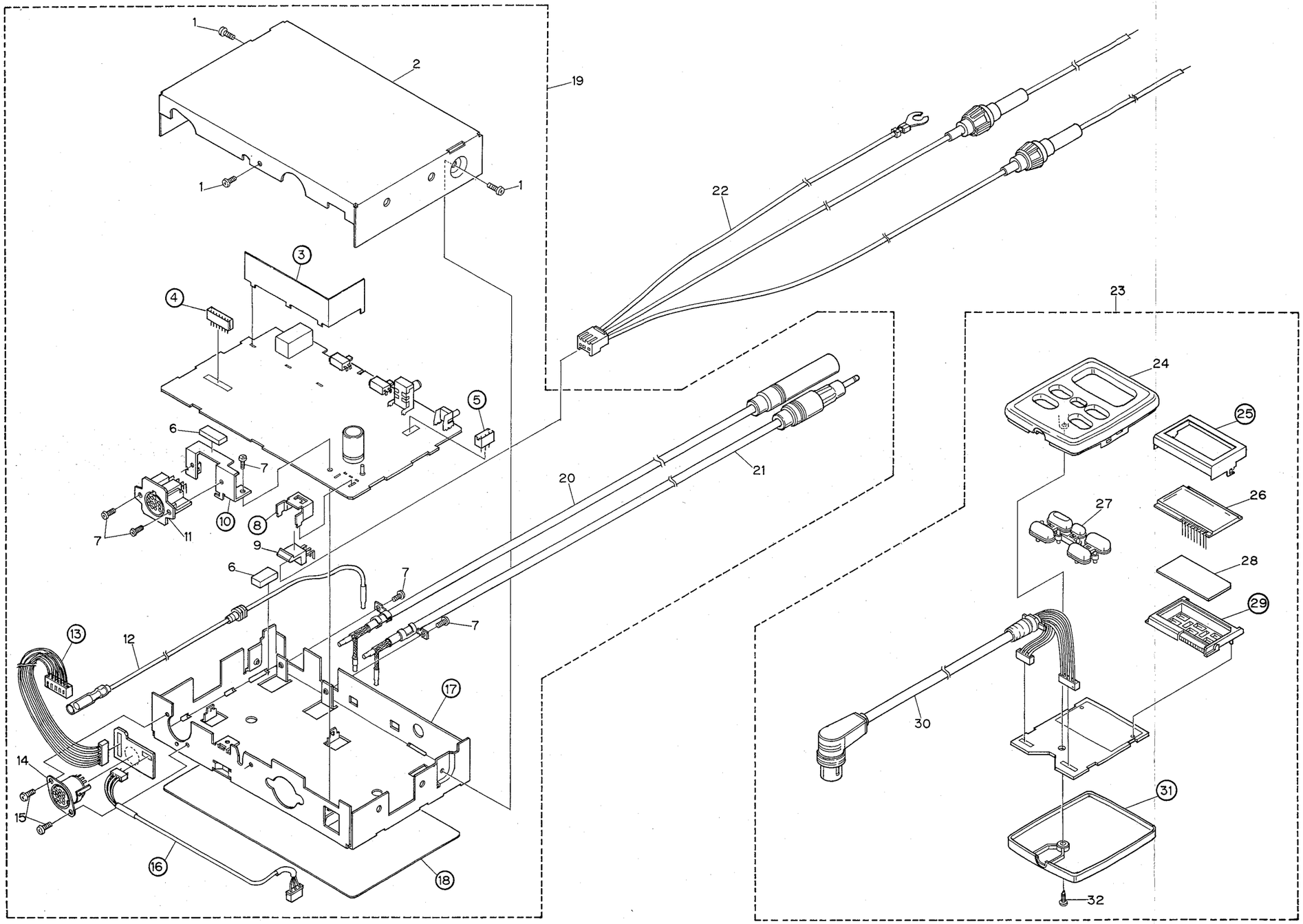


Fig. 41

● Parts List

Mark	No.	Description	Part No.
	1	Cushion	CNM2488
	2	Shaft	CLA1949
	3	Shaft	CLA2038
	4	Door	CAT1454
	5	Spring	CBH1428
	6	Stopper	CNV2905
	7	Spring	CBH1426
	8	Chassis L	CNC3846
	9	Damper	CNV3219
	10	Damper Holder	CNV2894
	11	Spring	CBH1379
◉	12	CD Mechanism Unit	CXK2600
	13	Screw (M2.6×8)	CBA1161
	14	Spring Holder	CNC3972
	15	Spacer	CNM3211
	16	Button (OPEN, EJECT)	CAC3153
	17	Lever	CNV2903
	18	Spring	CBH1427
	19	·····	
	20	Transistor (Q987)	2SB1299
	21-23	·····	
	24	Screw	PMS30P040FZK
	25	Screw (Transportation)	BMZ40P080FRD
	26	Pin (Transportation)	CLA1969
	27	Upper Case	CNB1614
	28	P.C.Board	CNP3042
	29	Connector	CDE2949
	30	Screw	BMZ26P040FMC
◉	31	Main Unit	CWX1373
	32	Connector	CKS1958
	33	Connector	CKS1955
	34	Connector	CKS2271
	35	Spacer	CNM3339
	36	Screw	PMS26P050FMC
◉	37	Extension Unit	CWX1456
	38	Plug (4P)	CKS1634
	39	TR Bracket	CNC3993
	40	Screw	CBA1181
	41	Chassis R	CNC3845
	42	Clamper	HEF-102
	43	Connector (4P)	CDE3671
	44	P.C.Board	CNP2717
	45	Lower Case	CNB1568
	46	Sub Chassis	CNC3995
	47	Screw	BMZ30P040FMC
	48	·····	
	49	·····	
	50	Connector (23P)	CKS2226
	51	Plug (4P)	CKS1051
	52	·····	
	53	·····	
	54	Screw	BMZ30P040FZK
	55	Connector Bracket	CNC3847
	56	Connector	CKS2101
	57	Plug	CKS2372
	58	Screw (M2.6×8)	CBA1186
	59	Cord Assy	CDE3723
	60	Grille	CNS2380
	61	Grille Assy	CXA4717
	62	Spacer	CNM3452
	63	Cushion	CNM3328
	64	Spacer	CNM3208

18. CONTROL ASSY EXPLODED VIEW



● Parts L

Mark	N
A	-

Fig. 42

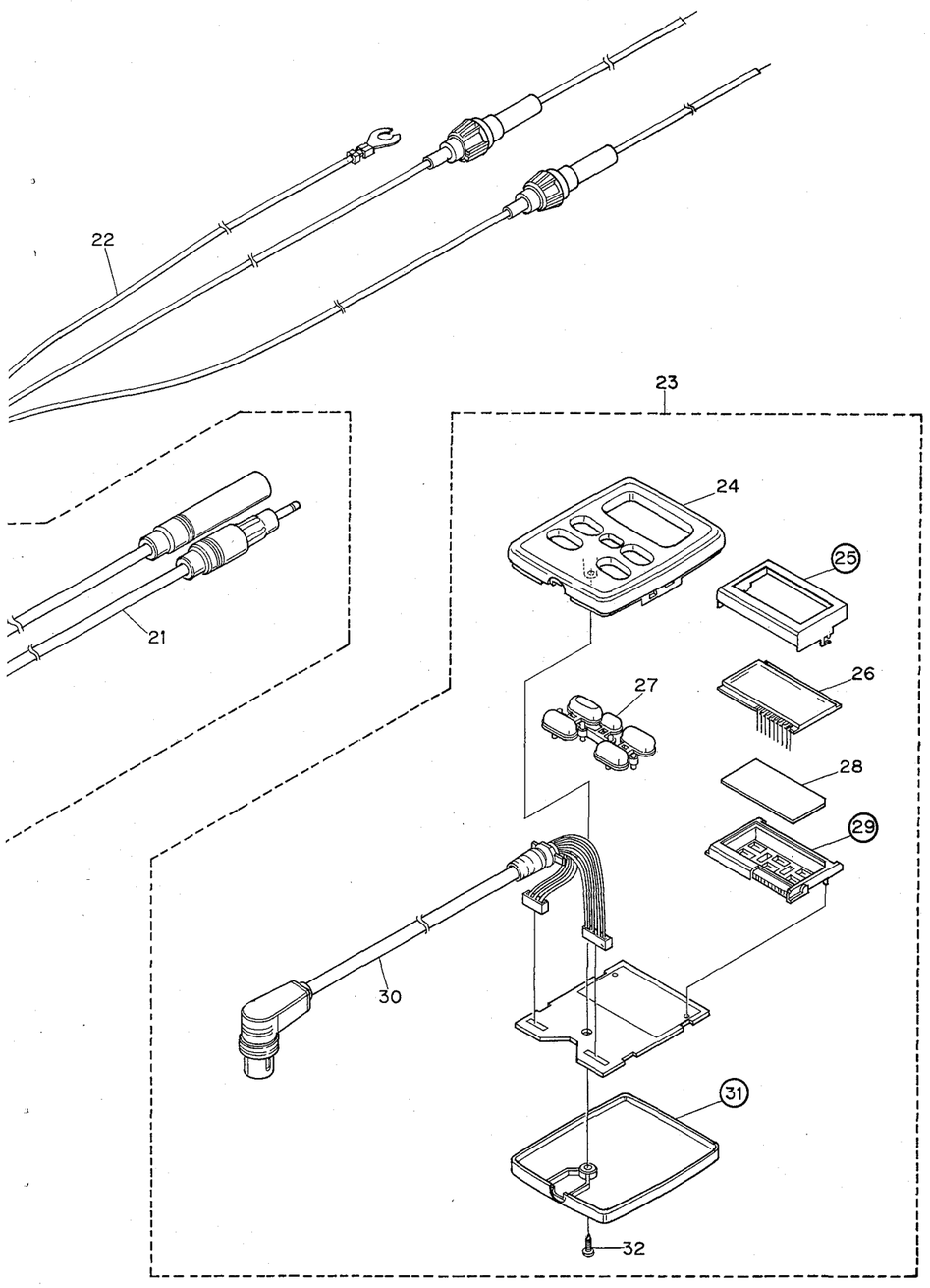


Fig. 42

● Parts List

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Screw	PMZ30P060FMC		21	Antenna Cable(plug)	CZD3145
	2	Case	CZN6048		22	Connector Assy	CZD3146
	3	Shield	CZN3291	◉	23	Commander Unit	CWM2977
	4	Plug	CKS-687		24	Grille	CZN6134
	5	Plug	CKS-567		25	Bracket	CZN3286
	6	Rubber	CZE2060		26	LCD	CAW1092
	7	Screw	BMZ26P050FMC		27	Button	CZA3122
	8	Bracket	CNC2640		28	Plate	CZN3287
	9	Plug	CKS-460		29	Holder	CZN3285
	10	Bracket	CZN3290		30	Cord Assy	CZD3176
	11	Connector	CKS1144		31	Case	CZN3284
	12	Cord Assy	CZD3167		32	Screw	BPZ26P080FZK
	13	Cord	CZD3170				
	14	Socket	CKP1007				
	15	Screw	BMZ26P040FMC				
	16	Cord	CZD3169				
	17	Chassis	CZN6049				
	18	Sheet	CZE2063				
◉	19	Hideaway Unit	CWM2979				
	20	Antenna Cable(jack)	CZD3144				

19. MAGAZINE (PXA1356) EXPLODED VIEW

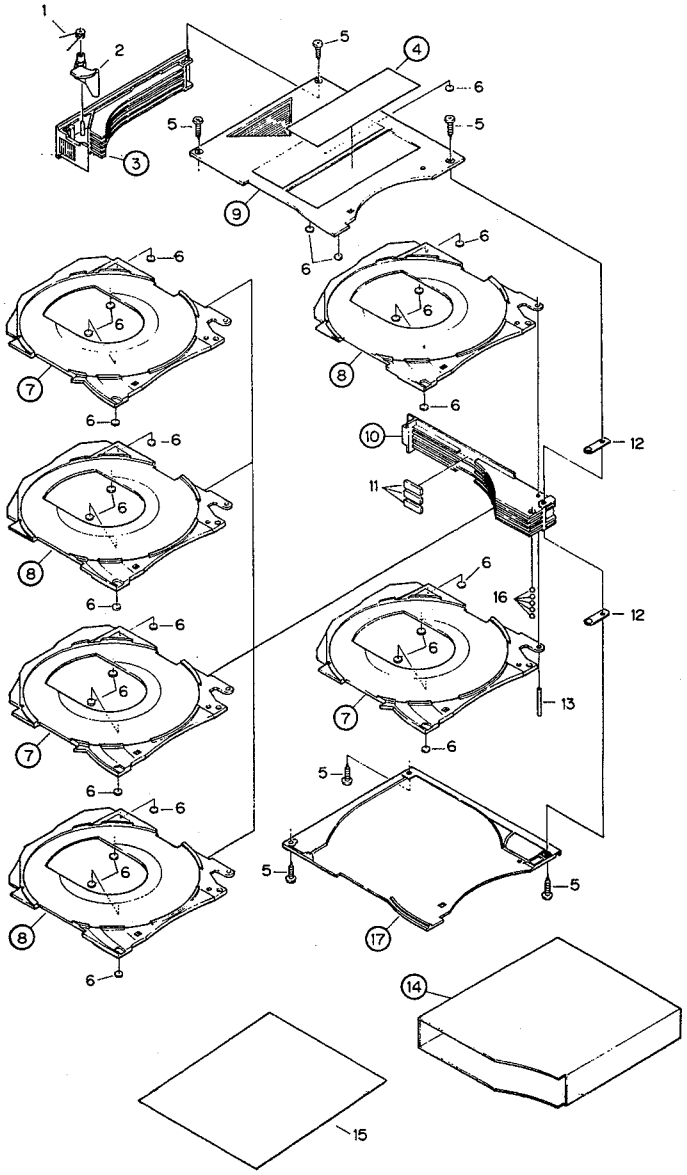


Fig. 43

● **Parts List**

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Spring M	PBH1067	11	Cushion Rubber	PNM1011
2	Lever	PNW1386	12	Spring	PBK-085
3	Case F	PNW1799	13	Shaft	PLB-281
4	Caution Label	PRW1139	14	PP Case	PHN1031
5	Screw	BPZ20P080FZK	15	Label	PRW1197
6	Cushion	PED-049	16	Ball	PBP-005
7	Tray A	PNW1935	17	Case B	PNW1596
8	Tray B	PNW1936			
9	Case T	PNW1126			
10	Case L	PNW1800			

20. PACKING METHOD

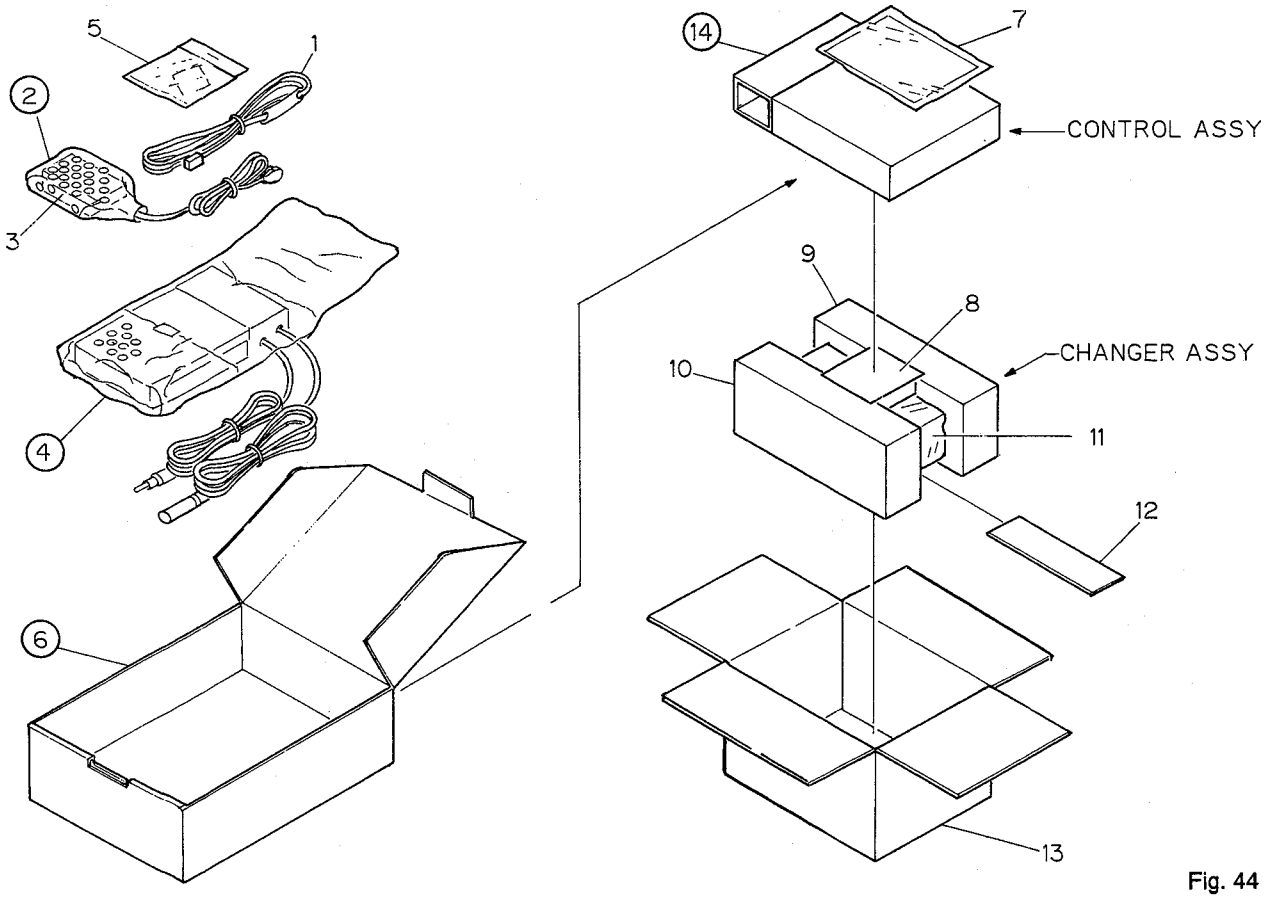


Fig. 44

● Parts List

*:Non Spare Part

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Connector Assy	CZD3146		12	Accessory Assy	CEA1711
	2	Cover	CEG1062		12-1	Cord Assy	CDE3723
	3	Air Cushioned Bag	CZE2046		12-2	Angle(×2)	CNB1634
*	4	Polyethylene Bag	CZE2073		12-4	Strap	CNF-111
	5-1	Fastener(×2)	CNM1716		12-5	Screw Assy	CEA1563
	5-2	Fastener(×1)	CZE2061		12-5-1	Screw for Strap(×1)	CBA-028
	5-3	Fastener(×1)	CZE2062		12-5-2	Screw(×5)	CBA1069
	6	Carton	CZH3299		12-5-3	Screw(×4)	HMB60P500FZK
*	7-1	Card	ARY1048		12-5-4	Screw(×4)	HMF40P080FZK
*	7-2	·····			12-5-5	Nut(×1)	NF40FMC
					12-5-6	Nut(×1)	NF50FMC
	7-3	Owner's Manual (English, French)	CRD1562		12-5-7	Nut(×4)	NR60FZK
					12-5-8	Screw(×1)	PMB50Y160FMC
*	7-4	Polyethylene Bag	E36-618		12-5-9	Washer(×1)	WS40FMC
	8	Magazine	PXA1356	*	12-5-10	Polyethylene Bag	E36-615
	9	Styrofoam	CHP1312				
	10	Styrofoam	CHP1313	*	12-6	Polyethylene Bag	E36-622
				*	12-7	Clamper	CEF1010
	11	Cover	CEG1091		13	Carton	CHG2192
		Caution Card	CRP1098	*	14	Spacer	CHW1161
		Sheel	CNM2887				
*		Caution Card	CRP1090				
*		Polyethylene Bag (Screw)	CEG1099				

21. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

Chip Resistor

RS1/□S□□□J,RS1/□□S□□□J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

CHANGER ASSY

Unit Number :
Unit Name :Main Unit

MISCELLANEOUS

======Circuit Symbol & No. Part	Name======	Part No.
IC 351		UPC1347GS
IC 601	(UPD6374GH-501)	GGF9001
IC 602 652		RC4558M
IC 651		PA3026
IC 661		TA78L05F
IC 701		UPD6375GC
IC 702		TC9237F
IC 703		TA2009F
IC 751		PD5180A
IC 755		LH5116HN-10T
IC 801		XRA6247FP
Q 351		2SB1260
Q 601		2SB709A
Q 651 705 801		UN2211
Q 652		2SB1184F5
Q 653 802		2SB1184F5
Q 751		UN2111
D 651		SC016-2
D 652		SC016-2
D 751		MA151A-MA
D 752		MA151WK-MT
D 754 755 756 758		MA153-MC
D 757		MA153-MC
D 759		MA151A-MA
L 701 751	Inductor	CTF1138
X 702	Crystal Resonator	CSS1067
X 751		CSS1084
VR 351	Semi-fixed 22kΩ(B)	CCP1021
VR 352 355 356	Semi-fixed 47kΩ(B)	CCP1023
VR 353 354	Semi-fixed 2.2kΩ(B)	CCP1015

RESISTORS

R 351	RS1/2S220J
R 352	RS1/16S472J
R 353	RS1/16S623J
R 354 781 795	RS1/16S473J
R 355	RS1/16S122J
R 356 357	RS1/16S683J
R 358 359	RS1/16S332J
R 360	RS1/16S684J
R 361	RS1/16S153J
R 364	RS1/16S102J
R 369 605 607 661 666 713 775 810	RS1/16S103J
R 370	RS1/16S133J
R 371 373	RS1/16S223J
R 372 615 616	RS1/16S472J
R 374 614 664 667 669 670	RS1/16S912J

======Circuit Symbol & No. Part	Name======	Part No.
R 375 377 609 611 613 651 653 656 658 663		RS1/16S102J
R 379		RS1/16S513J
R 380		RS1/16S104J
R 381		RS1/16S133J
R 606		RS1/16S224J
R 610 901 902 903 904 905		RS1/16S103J
R 617 915		RS1/16S102J
R 652 654 655 657		RS1/16S162J
R 660 662 665		RS1/10S151J
R 668		RS1/16S752J
R 671 672 702 703 704 791 802 803		RS1/16S102J
R 701		RS1/16S272J
R 708		RS1/16S201J
R 709 909		RS1/16S0R0J
R 711 712		RS1/16S100J
R 716 804		RS1/16S102J
R 717 751 789 821 822 910 913		RS1/16S0R0J
R 752		RS1/16S223J
R 753 760 797 911		RS1/16S473J
R 754 777 782 784 788 796		RS1/16S104J
R 755 758 759 762 763 765 773 787		RS1/16S222J
R 756		RS1/16S681J
R 757		RS1/16S222J
R 761 767 798 799		RS1/16S104J
R 766 772 786 790 794 807		RS1/16S563J
R 770 771 779 780		RS1/16S681J
R 792		RS1/16S101J
R 805 806		RS1/16S563J
R 811 812 813		RS1/10S151J
R 906 907		RS1/16S222J
R 908		RS1/16S103J
R 912		RS1/16S103J

CAPACITORS

C 351 717	CEV470M6R3
C 352	CKSQYB104K25
C 353 714	CEV101M6R3
C 354 355 609 610 702	CEV100M16
C 357 359 366	CKSRYB102K50
C 358	CCSRCH331J50
C 360	CCSRCH271J50
C 361	CCSRCH220J50
C 367	CKSYB154K25
C 368 751 753	CKSQYB104K25
C 369 604 606 652 654 710 715 716 721 722	CKSYB224K25
C 370	CKSQYB473K25
C 373 607	CKSYB224K25
C 601	CKSRYB222K50
C 603	CCSRCH331J50
C 605 611 659 666 709 762 763	CKSRYB103K25
C 608	CEV010M50
C 614 657 658	CKSRYB821K50
C 655 656	CKSQYB273K25
C 663	CKSQYB333K25

======Circuit Symbol & No.	Part Name======	Part No.
C 665	400 μF/10V	CCH1120
C 667		CSZST220M16
C 703		CCSRCH470J50
C 704 705		CCSRCH080D50
C 718		CEV330M6R3
C 719 720		CEV100M16
C 752 764 765		CCSRCH221J50
C 756		CKSRYB472K50
C 757		CKSRYB103K25
C 801		CEV220M16
C 802 803		CKSQYB223K25

Unit Number :
Unit Name :Extension Unit

MISCELLANEOUS

IC 971		M5218AL
IC 972		BA3121
IC 981		M51957AL
IC 982		M51958AL
Q 970 971		DTC314TS
Q 972 985 988		DTA114ES
Q 973 986 989		DTC114YS
Q 981 992		DTC114ES
Q 983		2SC3673
Q 984		2SD1859
Q 987		2SB1299
Q 990 991		2SC2458
D 971 972 973		1SS133
D 974 981 984		ERA15-02VH
D 982		HZS20L1
D 985 987		HZS6LB1
D 986		RD9R1JSB1
D 989		HZS11B1L
L 981	Choke Coil	CTH1047
EF 981	EMI Filter	CCG1006

RESISTORS

R 970 971	RD1/4PS113JL
R 972 973	RD1/4PS163JL
R 974 975	RD1/4PS332JL
R 976 977	RD1/4PS182JL
R 978 979	RD1/4PS122JL
R 980	RD1/4PS333JL
R 981	RD1/4PS363JL
R 982	RD1/4PS184JL
R 983	RD1/4PS153JL
R 984 985 992	RD1/4PS103JL
R 986 995	RD1/4PS681JL
R 987	RD1/4PS683JL
R 988	RD1/4PS473JL
R 989	RD1/4PS102JL
R 991	RD1/4PS222JL
R 993 994	RD1/4PS331JL
R 996	RD1/4PS242JL
R 997	RD1/4PS362JL

CAPACITORS

C 970	CEA101M10LL
C 971 979 981 984 988	CKCYB472K50
C 972 973	CCCCH470J50
C 974 975	CEA4R7M35LL
C 976 977	CEA330M10LL
C 978	CEA4R7M35LL
C 980 989	CEA470M16LL
C 982 983	470 μF/16V CCH1080
C 985	CEA101M6R3LL
C 986	CEA100M16LL
C 987	CEA470M10LL
C 990	CKCYB472K50

Unit Number :
Unit Name :Key Unit

SW991	Switch(Reset)	CSG1035
SW992	Switch(Eject)	CSG1004

Unit Number :
Unit Name :Mechanism P.C.Board

S 843	Switch(Home)	CSN1012
S 845 846	Switch(DCPT,TRPT)	CSN1022
M 841	Motor Unit(Carriage)	CXA4316
M 842	Motor Unit(Spindle)	CXA4540
M 843	Motor Unit(ELV)	CXA3238
M 844	TRAY Motor Unit	CXA3729

Unit Number :
Unit Name :Photo P.C.Board

D 841		HZS9A2L
VR 841	Semi-fixed 22kΩ(B)	CCP-380
S 841	Switch(MAG)	CSN1020
S 842	Switch(EJP)	CSH1022
P 841	Photo-Interrupter	ON1113
P 842	Photo-Interrupter	ON2160
R 841		RD1/4PS560JL
R 842		RD1/4PS221JL
R 843		RD1/4PS103JL

Miscellaneous Parts List

PU Unit	CGY1023

CONTROL ASSY

Unit Number :
Unit Name :Commander unit

MISCELLANEOUS

IC 981	LC7582A
D 981 982 983 984 985986 987 988 989 990	CL50YCDA
D 991 992 993	CL50YCDA
S 981 982 983 984 985 Switch	CSG-212

RESISTORS

R 981 982 983 984	RS1/10S471J
R 985	RS1/10S513J
R 986 987 988 989 990 991	RS1/10S121J
R 992	RS1/10S301J

CAPACITORS

C 981	CKSQYB681K50

Unit Number :
Unit Name :Hideaway P.C.Board

MISCELLANEOUS

IC 901	PD4267A
IC 351	BA1404F
IC 352	HA178L05
IC 353	UPC4570G
IC 902	S-8053ANO
Q 351 352	DTC323TK
Q 353	2SA1037K
Q 355 356	2SC2059K
Q 357 358	2SC2412K
Q 359	DTC114GK

======Circuit Symbol & No.	Part Name======	Part No.
Q 901 905		DTC114EL
Q 902		2SD1267
Q 903		2SC4038
Q 904		2SB1243
Q 906 907		2SB1237
Q 908		DTC114EK
D 351 354 908 909 915		1SS133
D 352		KV1450
D 353 902 907 910 911 912 913 914		DA204K
D 901 906		HZS7R5EB2
D 903 904		1SR139
D 905		HZS5R6EB2
D 916		1SS318
L 351	Ferri-Inductor	LAU2R2M
L 352	Inductor	LAU100K
L 353	Inductor	ELJ-NAR68K
L 354	Inductor	ELJ-NAR47K
L 355 356	Inductor	ELJ-NA2R7J
L 357	Inductor	CZT2004
L 901	Choke Coil	CTH1005
BPF351	Filter	CZT2002
TC 351		CZC2031
TC 352 353		CZC2033
RY 351	Relay	CZS2026
S 351 352	Switch(NOR-HIGH,1CH-2CH)	CZS2034
S 901	Switch(Reset)	CZS2032
VR 351	Volume	CZC2030
VR 352	Volume 33kΩ(B)	CZC2026
VR 353	Volume 220kΩ(B)	CZC2027
VR 354	Volume 4R7kΩ(B)	CZC2034
X 351		CZS2030
X 352		CZS2033
X 901		CZS2035

RESISTORS

R 353 354 369	RS1/10S153J
R 355 356 368 377 388	RS1/10S102J
R 359 360	RS1/10S561J
R 361 362	RS1/10S513J
R 363 386	RS1/10S272J
R 366	RS1/10S271J
R 367	RS1/10S123J
R 370 378 912 942 943	RS1/10S103J
R 371	RS1/10S560J
R 372	RS1/10S391J
R 373	RS1/10S243J
R 374	RS1/10S183J
R 375	RS1/10S101J
R 379	RS1/10S100J
R 380 383 384 385 392	RS1/10S472J
R 381	RS1/10S104J
R 382	RS1/10S363J
R 387	RS1/10S222J
R 390	RS1/10S0R0J
R 391 911 919 924 925 926 927 934 935	RD1/4PS103JL
R 901 907	RD1/4PS473JL
R 902 909	RS1/10S682J
R 903 910 916 917 918 922 923	RD1/4PS681JL
R 904	RD1/4PS102JL
R 906 908	RD1/4PS472JL
R 913 914 915 920 921	RD1/4PS682JL
R 928 933 936 937 938 939	RD1/4PS471JL
R 929 930 931 932	RS1/10S471J
R 940 947	RD1/4PS103JL
R 941 944	RS1/10S562J
R 945	RS1/10S220J
R 946	RS1/10S124J

======Circuit Symbol & No.	Part Name======	Part No.
CAPACITORS		
C 351 352		CKSQYB821K50
C 353 354 355 356		CKSQYB152K50
C 357 358 380 381		CEA010M50LL
C 359 386		CEA100M16LL
C 360 375 376 378		CKSQYB103K50
C 361 377		CCSQCH100D50
C 362		CKSQYB152K50
C 363		CCSQCH221J50
C 364 917		CKSQYB104K25
C 366		CEA220M10LL
C 367		CKSQYB391K50
C 368 369 374		CKSQYB102K50
C 370		CCSQUJ170J50
C 371		CCSQUJ100D50
C 372		CCSQUJ330J50
C 373		CCSQUJ151J50
C 379 916		CEA470M10LL
C 382 384 387		CEA101M10LL
C 383		CCSQCH330J50
C 385		CEA221M6R3L2
C 388		CEAR22M50LL
C 389		CCSQUJ100D50
C 391 392		CKSQYR154K16
C 901		CZC2010
C 902	1000 μF/16V	CZC2014
C 903	2200 μF/16V	CCH1001
C 904		CEA330M10L2
C 905		CEA101M10L2
C 906		CEA471M16L2
C 907		CEA2R2M50LL
C 908 909		CKSQYB562K50
C 910 911 912 913 914 915		CKSQYB222K50
C 918		CEA330M10LL
C 919 920 921 922 923		CKSQYB471K50

Unit Number :
Unit Name :DIN P.C.Board Unit

L 395 396	Inductor	CZT2011
C 395 396		CQMA472J50